
IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF UTAH, CENTRAL DIVISION

FATPIPE NETWORKS INDIA LIMITED, an
India corporation

Plaintiff,

v.

XROADS NETWORKS INC., a Delaware
corporation

Defendant.

*****SEALED*****

**MEMORANDUM DECISION
AND ORDER**

Case No. 2:09-cv-186-DN

District Judge David Nuffer

This patent case deals with computer networking. FatPipe Networks India Limited (“FatPipe”) holds two patents— United States Patent 7,269,143 B2 (the “‘143 Patent”) and United States Patent 7,444,506 B1 (the “‘506 Patent”)—which FatPipe claims have been infringed by XRoads Networks, Inc. (“XRoads”). XRoads, of course, denies infringement and asserts that FatPipe’s patents are invalid.

This memorandum decision and order resolves XRoads’ Cross-Motion for Summary Judgment (“444 Motion”).¹ In response to the 444 Motion, FatPipe filed a motion to strike the declaration upon which the 444 Motion was primarily based (“479 Motion to Strike”),² a Rule 56(d) motion (“481 Motion under Rule 56(d)”)³ and a cross-motion for summary judgment

¹ Defendant’s Notice of Cross-Motion and Cross-Motion for Summary Judgment and/or Partial Summary Judgment on All Claims for Relief and/or All Issues of Liability [sic] Asserted by Plaintiff FatPipe Networks, Ltd. (“444 Motion”), [docket no. 444](#), filed March 6, 2012. “XRoads’ [444] Motion is a Cross-Motion in that Fatpipe has previously moved for summary judgment in its favor as to various claims.” *Id.* at 2.

² Plaintiff FatPipe Networks’ Motion to Strike and/or Exclude Declaration [444-6] of Daren French in Support of XRoads Motion [444] for Summary Judgment (“479 Motion to Strike”), [docket no. 479](#), filed April 19, 2012.

³ Plaintiff FatPipe Networks’ [Rule 56\(d\)](#) Motion in Response to Defendant’s Motion [444] for Summary Judgment (“481 Motion under [Rule 56\(d\)](#)”), [docket no. 481](#), filed April 19, 2012.

(“483 Cross-Motion”).⁴ In addition, after briefing was completed on the 444 Motion, FatPipe filed a motion to reopen the briefing (“583 Motion to Reopen”) along with a new expert declaration (the “Williams Declaration”).⁵ The 583 Motion to Reopen was granted in part to allow each party to file a supplementary memorandum on the significance of the Williams Declaration.⁶ After each supplementary memorandum was received, FatPipe filed objections to XRoads’ memorandum⁷ and XRoads filed a response to FatPipe’s objections.⁸

Thus, the following motions will be resolved in this memorandum decision and order:

- XRoads’ 444 Motion for Summary Judgment (“444 Motion”)⁹
- FatPipe’s 479 Motion to Strike the French Declaration (“479 Motion to Strike”)¹⁰
- FatPipe’s 481 Motion under Rule 56(d) (“481 Motion under Rule 56(d)”)¹¹
- FatPipe’s 483 Cross-Motion for Summary Judgment (“483 Cross-Motion”)¹²
- FatPipe’s 583 Motion to Reopen Briefing on the 444 Motion (“583 Motion to Reopen”)¹³

For the reasons stated below, the 444 Motion is GRANTED IN PART AND DENIED IN PART; the 479 Motion to Strike is DENIED; the 481 Motion under Rule 56(d) is DENIED; the 483 Cross-Motion for Summary Judgment is GRANTED IN PART AND DENIED IN PART; and the 583 Motion to Reopen is DENIED.

⁴ Plaintiff FatPipe Networks’ Summary Judgment Cross-Motion to XRoads’ Motion [444] for Summary Judgment (“483 Cross-Motion”), [docket no. 483](#), filed April 19, 2012.

⁵ Plaintiff’s Motion to Re-Open and Supplement the Record on Defendant’s Motion for Summary Judgment [Dkt. No. 444] (“583 Motion to Reopen”), [docket no. 583](#), filed November 29, 2013.

⁶ Docket Text Order, docket no. 610, entered August 14, 2014.

⁷ DUCivR 7-1(b)(1)(B) Objections of FatPipe to the Purported Evidence and Response of Defendant XRoads Networks [Dkt. No. 614], [docket no. 615](#), filed September 19, 2014.

⁸ Response of Defendant XRoads Networks to Plaintiff’s Evidentiary Objections, [docket no. 617](#), filed September 22, 2014.

⁹ 444 Motion, [docket no. 444](#), filed March 6, 2012.

¹⁰ 479 Motion to Strike, [docket no. 479](#), filed April 19, 2012.

¹¹ 481 Motion under [Rule 56\(d\)](#), [docket no. 481](#), filed April 19, 2012.

¹² 483 Cross-Motion, [docket no. 483](#), filed April 19, 2012.

¹³ 583 Motion to Reopen, [docket no. 583](#), filed November 29, 2013.

With respect to the 444 Motion and related filings, the parties have submitted over 1200 pages of material to review. The materials are not concisely or well organized and are highly argumentative. Each side fails to provide focused responses or replies to the other party's arguments. The task of comprehension and decision has been extremely difficult. The frequent unprofessional tone is distracting.

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BACKGROUND

Traditional Network Design

Under “traditional network design”¹⁴ or “conventional network topology,”¹⁵ several computers (or other “nodes”) are connected to a Local Area Network (“LAN”);¹⁶ the LAN is connected to a router;¹⁷ and the router is connected to a Wide Area Network (“WAN”) such as the Internet.¹⁸ Multiple routers may be physically present within the LAN, but only one router is designated as the “default gateway” assigned to manage all network traffic into and out of the LAN.¹⁹ Figure 1 below depicts a single-router LAN:

¹⁴ [United States Patent 7,269,143](#) B2 (“[143 Patent](#)”) col. 4 l. 21, Exhibit A to [docket no. 1](#), filed February 27, 2009.

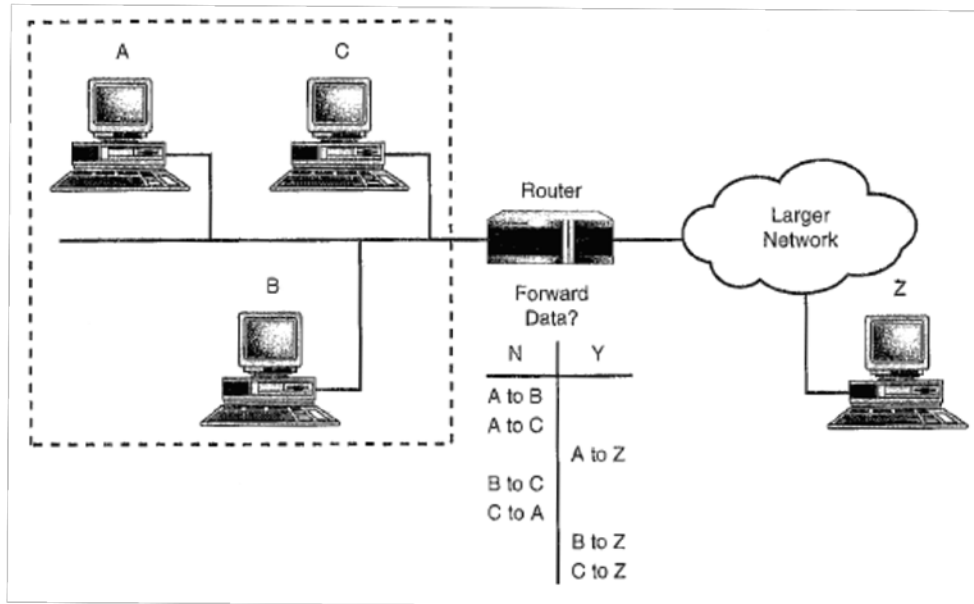
¹⁵ *Id.* col. 1 l. 53.

¹⁶ *Id.* col. 1 ls. 53-57.

¹⁷ *Id.* col. 2 ls. 6-7.

¹⁸ *Id.* col. 2 ls. 14-15.

¹⁹ *Id.* col. 2 ls. 29-41.

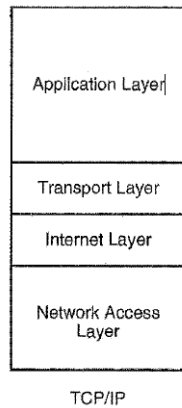
Figure 1²⁰

If a computer on the LAN wishes to communicate with a computer or server on a different LAN (e.g., “Z” in Figure 1), the computer must follow certain protocols, since network data is transmitted according to protocols. A common protocol is Transmission Control Protocol/Internet Protocol (“TCP/IP”).²¹ It is conceptualized in layers. “When taken together, the . . . various layers are called the **protocol stack**.”²² A schematic of the TCP/IP protocol stack is provided below, in Figure 2:

²⁰ Joe Casad, Sams Teach Yourself TCP/IP in 24 Hours 14 (3d ed. 2004). The parties provided this textbook to the court for use in claim construction, see [docket no. 414](#), and cited to it throughout their briefing on the 444 Motion.

²¹ James F. Kurose & Keith W. Ross, Computer Networking: A Top-Down Approach 243 (5th ed. 2010). The parties provided this textbook to the court for use in claim construction, see [docket no. 414](#), and cited to it throughout their briefing on the 444 Motion.

²² Kurose & Ross at 243 (emphasis in original); Kasera Expert Report at 3-4, [docket no. 339-1](#), filed under seal May 24, 2011.

Figure 2²³

In a TCP/IP protocol networking system, data is created at the application layer and passes down through the layers in the protocol stack until it reaches the network access layer.²⁴ “As an outgoing transmission passes down through the stack, each layer includes a bundle of relevant information called a **header** along with the actual data.”²⁵ Together, the header and the actual data make up a “data packet.”²⁶ “The data packet looks different at each layer, and at each layer it goes by a different name.”²⁷ At the Application Layer, it is called a message. At the Transport Layer, it is called a segment if it comes from the TCP protocol but it is called a datagram if it comes from the UDP protocol. At the Internet Layer, the data packet is called a datagram. And at the Network Access Layer, it is called a frame.²⁸ The frame contains each layer’s encapsulated data and headers, including all flags, IP addresses, physical addresses, and

²³ Casad at 25. Because “[r]eal-world implementations of TCP/IP, [sic] do not always map cleanly to the models . . . [.]” Casad at 26, some scholars differ on how to model the TCP/IP protocol stack. For example, Kurose & Ross identifies five layers in the TCP/IP protocol stack, Kurose & Ross at 51, while Casad identifies four. The differences between these two models are nominal and are not crucial to this discussion.

²⁴ Casad at 28-29.

²⁵ *Id.* at 26 (emphasis in original).

²⁶ *Id.* at 27.

²⁷ *Id.*

²⁸ *Id.*

other information, and it is turned into a stream of bits at the lowest sublayer of the Network Access Layer.²⁹

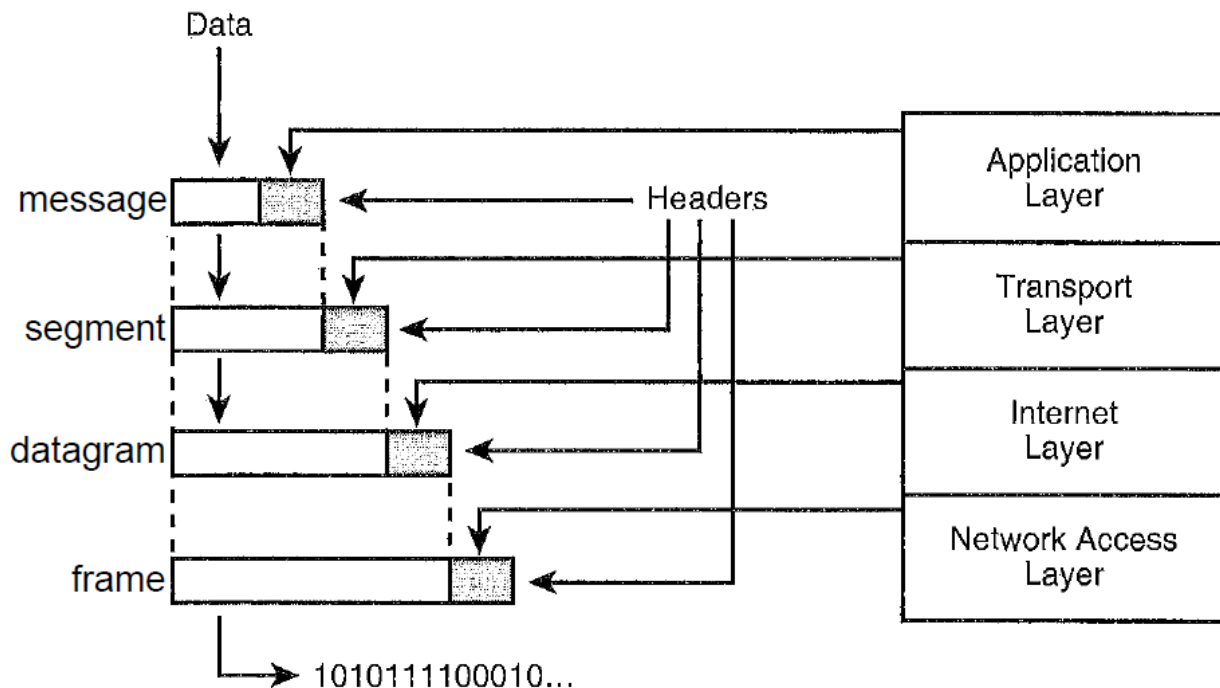


Figure 3³⁰

Once the data frame is created, it passes over the network medium (fiber optic, Ethernet, coaxial cable, etc.). If the data is intended for a computer on the same LAN, it does not cross the router.³¹ But if the data is intended for a server or another computer on a *different* LAN, the data passes through the router designated as the default gateway, and the router forwards the data according to the information located in its routing tables.³²

For example, if one host (client) wishes to initiate a TCP connection between itself and another host (server) on a separate LAN, “[t]he client application process first informs the client

²⁹ *Id.* at 27-29.

³⁰ *Id.* at 27 (“message,” “segment,” “datagram,” and “frame” labels added); Kasera Expert Report at 4-5.

³¹ Casad at 13 (“Data addressed to another computer or device on the local subnet does not cross the router and therefore doesn’t clutter up the transmission lines of the greater network.”).

³² *Id.* at 152.

TCP that it wants to establish a connection to a process in the server.”³³ It does so in the following steps:

- “The client-side TCP first sends a special TCP segment [called a “SYN segment”³⁴] to the server-side TCP”³⁵ with no Application Layer data. One of the flag bits in the SYN segment’s header—the SYN bit—is set to 1.³⁶
- The SYN segment is encapsulated within an IP datagram and sent to the server.³⁷ The IP datagram header includes the source and destination IP addresses.³⁸
- Once the IP datagram arrives at the server, the server extracts the SYN segment from the IP datagram and sends, among other things, a “connection-granted” segment back to the client-side TCP. Like the initial transmission from the client to the server, the SYN bit in the “connection-granted” segment is set to 1.³⁹
- Once it receives the “connection-granted” segment, “the client host then sends the server yet another segment; this last segment acknowledges the server’s connection-granted segment The SYN bit is set to zero, since the connection is established.”⁴⁰

³³ Kurose & Ross at 264.

³⁴ The term “SYN” comes from the initiation phase of a network transmission. Kurose & Ross at 264. “SYN” is short for “synchronize.” Casad at 95.

³⁵ Kurose & Ross at 264.

³⁶ Id. at 264; Kasera Expert Report at 4.

³⁷ Kurose & Ross at 264.

³⁸ Casad at 54; Kurose & Ross at 343.

³⁹ Kurose & Ross at 265.

⁴⁰ Id.

- Upon completion of these steps, which is known as a “three-way handshake,” the client and server hosts can send segments containing data to each other.⁴¹

The patents at issue in this case—the [‘143 Patent](#) and the [‘506 Patent](#)—claim variations on “traditional network design” as described above, which FatPipe believes have been infringed by XRoads. XRoads disagrees, and claims its devices deviate from “traditional network design” in a *different way* than FatPipe’s [‘143](#) and [‘506 Patents](#).

UNDISPUTED FACTS

The ‘143 Patent⁴²

1. The [‘143 Patent](#) contains one independent claim.⁴³
2. Claim 1 teaches “[a] controller for combining routers to provide increased concurrency in external access to a computer network[.]”⁴⁴ The [‘143 Patent](#) states that “traditional network design cannot support data routing over multiple routers in a LAN.”⁴⁵
3. The “controller”⁴⁶ is made up of three components:
 - a “router identifier,” which identifies the routers to which the controller is connected;⁴⁷
 - a “router selector,” which selects a particular router through which information will be sent;⁴⁸ and

⁴¹ [Id.](#); Kasera Expert Report at 4.

⁴² [United States Patent 7,269,143](#) B2 (“[‘143 Patent](#)”), Exhibit A to [docket no. 1](#), filed February 27, 2009.

⁴³ *Id.* col. 39 ls. 14-30 (Claim 1).

⁴⁴ *Id.* col. 39 ls. 14-15; *see also id.* col. 1 ls. 1-3.

⁴⁵ *Id.* col. 4 ls. 21-22.

⁴⁶ *Id.* col. 39 l. 14.

⁴⁷ *Id.* col. 39 ls. 17-19.

⁴⁸ *Id.* col. 39 ls. 20-26.

- a “SYN modifier,” which “provides modified SYN requests that contain the address of an identified router, each response specifying the address of an identified router which was selected by the router selector.”⁴⁹

4. The Claim Construction Order defines “SYN modifier” as “a process or device which modifies a SYN packet or a SYN request after router selection and specifies the address of an identified router which was selected by the router selector.”⁵⁰

5. “SYN request” is used interchangeably with “SYN packet.”⁵¹ The Claim Construction Order defines “SYN packet” or “SYN request” as “a packet which contains a synchronize (SYN) control flag used in establishing a communication session between two network nodes.”⁵² “A ‘packet’ is a controlled unit of data transmission in a packet-switched network.”⁵³

6. The [‘143 Patent](#) states that “IP communication starts with a SYN packet. SYN packets in and of themselves are known in the art.”⁵⁴

7. The [‘143 Patent](#) states that the IP address and the physical address are “contain[ed]” within a “modified SYN request.”⁵⁵

⁴⁹ *Id.* col. 39 ls. 27-30.

⁵⁰ Memorandum Decision and Report and Recommendation Regarding Claim Construction (“Claim Construction Order”) at 12, [docket no. 438](#), filed February 9, 2012; *see* Order, [docket no. 460](#), entered March 16, 2012 (adopting Claim Construction Order).

⁵¹ Claim Construction Order at 11.

⁵² [Id.](#)

⁵³ [Id.](#)

⁵⁴ [‘143 Patent](#) col. 2, ls. 56-58.

⁵⁵ *Id.* [col. 39 ls. 31-40](#); FatPipe’s Memorandum in Opposition to XRoads’ Motion [444] for Summary Judgment (“Opposition Memo”) at 10, [docket no. 485](#), filed April 19, 2012 (“The presence of an IP address and a physical address in a SYN request are not something the [‘143 patent](#) ‘assumes’ but is rather a limitation that is set forth in the claims.”).

8. The Claim Construction Order defines “modified SYN request” as “a SYN packet or SYN request which has been modified from conventional usage.”⁵⁶

9. The SYN modifier modifies the SYN request by altering the IP address or the physical address that is contained within the SYN requests such that the IP address or physical address of the “machine running the controller” or the “first identified router” is replaced by the IP address or physical address of the router or machine “selected by the router selector.”⁵⁷

10. The Claim Construction Order defines “SYN modifier” as a “process or device which modifies a SYN packet or a SYN request *after router selection . . .*.”⁵⁸ Claim 1 of the [‘143 Patent](#) explains that the SYN modifier specifies the address of an identified router which “was selected” previously by the router selector.⁵⁹ Claim 5 of the [‘143 Patent](#) explains that a “modified SYN packet” contains “the physical address of a second identified router selected by the router selector *instead of specifying the physical address of the first identified router.*”⁶⁰ Figure 5 in the [‘143 Patent](#) shows “modify SYN request” taking place *after* “select router.”⁶¹ During patent prosecution, FatPipe argued to the USPTO that the SYN modifier operates to provide:

modified SYN requests that contain the address of an identified router, each response specifying the address of an identified router which was selected by the

⁵⁶ Claim Construction Order at 12.

⁵⁷ [‘143 Patent](#) col. 39 l. 31 – col. 40. l. 15; Opposition Memo at 10 (quoting Defendant’s Memorandum in Support of Its Cross-Motion for Summary Judgment and/or Partial Summary Judgment on Each and Every Claim for Relief Asserted by Plaintiff and/or Each and Every Theory of Liability (“444 Memorandum”) at 11-12, [docket no. 444-2](#), filed March 6, 2012). The Opposition Memo states merely that “SYN modifier operational details are in dispute,” but provides no additional opposing facts.

⁵⁸ Claim Construction Order at 12 (emphasis added).

⁵⁹ [‘143 Patent](#) col. 39 ls. 29-30.

⁶⁰ *Id.* [col. 40 ls. 12-15](#) (emphasis added).

⁶¹ *Id.* fig. 5.

router selector. That is, the invention used SYN modification *after selection of a router*. This is not taught by Zisapel.⁶²

...

In short, Zisapel not only fails to anticipate the claimed invention – it actually teaches away from the claimed invention by relegating SYN requests to a minor role at a pre-router-selection point in the process described, whereas SYN requests play a major role in the present invention and do so *after* router selection.⁶³

11. Not all subsequent data requests during a single session are sent through the same router.⁶⁴ Data transmitted during the same session may be sent over multiple paths and then recombined at its destination.⁶⁵ FatPipe argued to the PTO:

Th[e Claim 1] language [“by sending subsequent data requests and their corresponding responses through the selected router”] was apparently understood by the [patent] Examiner to mean that once a router had been selected, *all* subsequent data requests and responses must be sent through that router. However, the claim does not say this, and this is not the correct interpretation of the claim.⁶⁶

12. FatPipe’s expert, Dr. Sneha Kumar Kasera, testified that SYN modification is different than Network Address Translation (“NAT”).⁶⁷

⁶² Opposition Memo at 12 (quoting 444 Memorandum at 11-12) (emphasis by XRoads). FatPipe argues the “prosecution history speaks for itself.” Opposition Memo at 12. This is not an opposing fact.

⁶³ 444 Memorandum at 12 (quoting Amendment filed with the USPTO in 2002 by FatPipe at 6, [docket no. 436-1](#), filed February 7, 2012) (emphasis in original). FatPipe did not include this paragraph in its Opposition Memo even though it is included as a fact in XRoads’ 444 Memorandum. FatPipe did not state the paragraph was opposed, so it is treated as an unopposed fact.

⁶⁴ Claim Construction Order at 13 (defining “subsequent data requests” as data requests that are “subsequent to the router selector selecting between identified routers”).

⁶⁵ [‘143 Patent](#) col. 5 ls. 7-17 (“The data stream is multiplexed over several routers going out of the first LAN, and then at the receiving LAN the data stream is recombined to restore the sequence of the original data transfer.”).

⁶⁶ 444 Memorandum at 12 (citing Excerpts from Prosecution History at 5, [docket no. 436-1](#), filed February 7, 2012). FatPipe does not specifically oppose this paragraph. *See* Opposition Memo at 17 (omitting the paragraph from XRoads list of stated facts).

⁶⁷ 444 Memorandum at 30; Opposition Memo at 38; Kasera Expert Report at 39.

13. FatPipe's expert, Dr. Sneha Kumar Kasera, testified that the ['143 Patent](#) teaches that an existing SYN packet is modified, whereas in the XRoads devices, the XRoads proxy initiates a new session and creates a new SYN packet.⁶⁸

14. FatPipe stated in a discovery response that it had "determined that XRoads' method of load balancing does not appear to infringe the ['143 patent](#) and therefore will move to dismiss all claims based on that patent."⁶⁹ FatPipe later informed XRoads that it intended to continue pursuing ['143 Patent](#) infringement.⁷⁰

The ['506 Patent](#)⁷¹

15. The ['506 Patent](#) contains three independent claims: Claims 1, 10, and 22.

16. Claim 1 teaches a "method of preparing data for transmission" along "at least two networks which are *at least partially in parallel* and which *differ in their respective security characteristics*."⁷² Claim 1 also teaches "receiving data packets in a first collection of data

⁶⁸ Deposition of Sneha Kumar Kasera ("Kasera Dep.") at 32:13-20, 34:3-12, [docket no. 444-4](#), filed March 6, 2012, states:

- A. So the XRoads device creates a new TCP connection, so it creates a new TCP header.
- Q. Does it create a new session?
- A. It creates a new TCP session, correct.
- Q. And the ['143 patent](#) doesn't teach a new TCP session; is that accurate?
- A. The ['143 patent](#) does not explicitly start a new TCP session
-
- Q. And the difference is that the XRoads proxy initiates a new session and creates a new SYN; is that accurate?
- A. Yes.
- Q. Whereas the ['143 Patent](#) teaches that an existing SYN is modified; is that accurate?
- A. Yes.
- Q. Would it be accurate to say that the XRoads device does not actually change the SYN packet?
- A. Yes.

⁶⁹ Opposition Memo at 22 (quoting 444 Memorandum at 22).

⁷⁰ Opposition Memo at 22.

⁷¹ [United States Patent 7,444,506](#) B1 ("['506 Patent](#)"), Exhibit B to Complaint, docket no. 1-2, filed February 27, 2009.

⁷² *Id.* [col. 11 ls. 24-28](#) (emphasis added).

packets” and “receiving data packets in a second collection of data packets.”⁷³ The method described in Claim 1 treats the data packets in the first collection with a “supplemental security measure,” which “includes at least encrypting data in the data packet according to a security policy.”⁷⁴ Data packets in the second collection are sent over a “second path through the private network, *without* treating the data packets of the second collection with the *supplemental security measure*.”⁷⁵ Claim 1 states that the supplemental security measure “is not applied” to the packets sent over the second network.⁷⁶

17. “At least partially in parallel” means, as to networks, “at least two network interfaces are available to be used at the same instant in time at least for some of the time.”⁷⁷

18. “At least partially in parallel” means, as to transmission of data packets, “transmission over parallel networks during which transmission of a first portion of data chronologically at least overlaps in part transmission of a second portion of data, even if there are also times when only one of the parallel networks is actually carrying part of the divided data.”⁷⁸

19. “Differ in their respective security characteristics” is not defined in the Claim Construction Order.

⁷³ *Id.* [col. 11 ls. 29-31](#).

⁷⁴ *Id.* [col. 11 ls. 32-39](#).

⁷⁵ *Id.* [col. 11 ls. 42-45](#) (emphasis added); *see also* Kasera Expert Report at 42 (“A path through a private network . . . might not be perceived vulnerable . . . and therefore the users of this path might be willing to forgo encryption of data . . .”).

⁷⁶ [‘506 Patent](#) col. 11 ls. 51-52.

⁷⁷ Claim Construction Order at 15.

⁷⁸ *Id.*

20. A “supplemental security measure” is a measure, including at least encryption, which supplements the security of data.⁷⁹

21. Claim 10 claims a “controller” that is “configured for transmission of data packets utilizing at least two networks at least partially in parallel to *efficiently compensate* for lower security in one network”⁸⁰

22. “Lower security in one network” means that “network X is vulnerable to a threat that network Y resists.”⁸¹

23. “Efficiently compensate” is not defined in the Claim Construction Order.

24. Claim 22 claims a “controller” that is used for “efficient secure parallel data transmission, comprising: components configured for transmission of data packets at least partially in parallel and to *efficiently compensate* for lower internet security”⁸²

25. The twenty-eight original claims were rejected for obviousness by the PTO, based on two prior art references.⁸³ After FatPipe submitted proposed amendments, including adding the phrases “differ in their respective security characteristics” and “at least partially in parallel,” the Examiner approved the three independent claims of the [‘506 Patent](#) because “the cited prior arts . . . do not anticipate nor fairly and reasonably teach” what the [‘506 Patent](#) taught with the added language.⁸⁴

⁷⁹ [Id.](#) at 14.

⁸⁰ [‘506 Patent](#) col. 12 ls. 28-32 (emphasis added); Opposition Memo at 18 (quoting 444 Memorandum at 19; providing no opposing facts).

⁸¹ Claim Construction Order at 17.

⁸² [‘506 Patent](#) col. 13 l. 42 to col. 14 l. 1.

⁸³ Opposition Memo at 19.

⁸⁴ Opposition Memo, Exhibit B.

26. The [‘506 Patent](#) claims the ability to “efficiently compensate”⁸⁵ for lower security in one network and the ability to “resequence packets.”⁸⁶

27. At least two WAN links are needed to test whether a device transmits data along networks that are “at least partially in parallel and which differ in their respective security characteristics,”⁸⁷ or whether a device “efficiently compensates for lower security in one network.”⁸⁸

28. FatPipe’s expert, Dr. Sneha Kumar Kasera, used only one WAN link to test XRoads’ technology.⁸⁹

XRoads’ Devices

29. XRoads’ devices engage in creation rather than modification of SYN packets.⁹⁰ When a new transmission session is initiated, XRoads devices create new packets of data.⁹¹ All packets associated with a session are routed via the same interface across the network. This process terminates a client session and establishes multiple new sessions where each specific session must traverse the same link.⁹²

⁸⁵ [‘506 Patent](#) col. 12 ls. 31, 59; *id.* col. 13 l. 45.

⁸⁶ *Id.* col. 12 ls. 23-27 (Claim 9); *id.* col. 13 ls. 27-31 (Claim 19) (neither of these dependent claims are asserted by FatPipe); *id.* fig. 7; *id.* fig. 8.

⁸⁷ *Id.* col. 11 ls. 26-28 (Claim 1, in part) (“obtaining connections to at least two networks”); XRoads Networks, Edge Network Appliance Platform Notes: EdgeXOS Setting Up Site2Site Client Connectivity at 8, attached as Exhibit D to Opposition Memo, [docket no. 485-4](#), filed April 19, 2012 (describing setup process of XRoads devices and instructing to “[e]nter the WAN1 and WAN2 addresses”).

⁸⁸ [‘506 Patent](#) col. 12 ls. 31-32 (Claim 10).

⁸⁹ Kasera Expert Report at 42 (showing a connection only to “WAN1”); Declaration of Daren French in Support of Motion for Summary Judgment (“French Decl.”) at 6, [docket no. 444-6](#), filed March 6, 2012 (stating Kasera tested only a single XRoads device and “only used a single WAN (wide area network) connection.”).

⁹⁰ Kasera Dep. at 32:13-20, and 34:3-12; *see also* French Decl. at 14-15 (stating that XRoads devices do not modify a physical address of a SYN packet).

⁹¹ Kasera Dep. at 34:3-12 (testifying that [‘143 Patent](#) teaches that an *existing* SYN packet is modified, whereas in the XRoads devices, the XRoads proxy initiates a new session and creates a new SYN); *see also* French Decl. 14-15 (stating that XRoads devices do not modify physical address of a SYN packet).

⁹² French Decl. at 20-23. FatPipe merely “disputes” these facts, but does not provide opposing facts to support its dispute. *See, e.g.*, Opposition Memo at 25. *See also* Kasera Expert Report at 16 (“The XRoads technology uses a

30. XRoads devices utilize technology called “link bonding,” where all the packets associated with a session are routed via the same interface; they are not split across multiple networks.⁹³ XRoads devices do not re-route subsequent data packets using a “router selector.”⁹⁴ Link “bonding” combines the speeds of two or more links for the same download to obtain an aggregate throughput for an individual client.⁹⁵ Link bonding does not require knowledge of a gateway router’s IP address or physical address to select a path.⁹⁶

31. XRoads devices cannot be configured to use encryption on one path and use no encryption on another.⁹⁷ Such a configuration results in an error message.⁹⁸

32. XRoads devices do not employ “efficient compensation” or “resequencing.”⁹⁹

33. Once sessions are initiated in an XRoads device, all of the packets associated with the session are routed via the same interface out to the Internet.¹⁰⁰

34. XRoads’ devices do not modify physical/MAC addresses.¹⁰¹

35. XRoads devices do not contain a “SYN modifier.”¹⁰²

36. XRoads devices do not contain a “router selector.”¹⁰³

TCP proxy When a client PC wishes to publicly access a web server, e.g., www.cnn.com, it initiates a TCP connection to www.cnn.com by sending a TCP SYN segment . . . that goes only as far as the proxy. The proxy then initiates *another* TCP request by sending a *new* TCP SYN segment to the web server.” (emphasis added)).

⁹³ French Decl. at 21.

⁹⁴ Id. at 17-20.

⁹⁵ Opposition Memo at 25 (quoting 444 Memorandum at 23).

⁹⁶ Opposition Memo at 26 (quoting 444 Memorandum at 24).

⁹⁷ French Decl. at 32-33.

⁹⁸ French Decl. at 32 (“[E]xamination of the XRoads appliances demonstrates that it is not even possible to configure encryption on one tunnel without configuring encryption on another.”).

⁹⁹ French Decl. at 38-39.

¹⁰⁰ Opposition Memo at 25 (quoting 444 Memorandum at 23).

¹⁰¹ Opposition Memo at 25 (quoting 444 Memorandum at 23).

¹⁰² Opposition Memo at 24 (quoting 444 Memorandum at 22 (quoting French Decl. ¶ 8), providing no opposing facts).

37. XRoads devices do not permit the simultaneous parallel transmission of data over an encrypted and non-encrypted network.¹⁰⁴

Procedural Facts

Complaint and Counterclaims

38. On February 27, 2009, FatPipe filed this lawsuit against XRoads, alleging four causes of action: (1) Patent Infringement of the [‘143 Patent](#); (2) Patent Infringement of the [‘506 Patent](#); (3) Inducement to Infringe the [‘143 Patent](#); and (4) Inducement to Infringe the [‘506 Patent](#).¹⁰⁵

39. On March 31, 2009, XRoads answered the Complaint by denying infringement and asserting four counterclaims against FatPipe: (1) Declaratory Judgment of Non-Infringement of the [‘143 Patent](#); (2) Declaratory Judgment of Invalidity of the [‘143 Patent](#); (3) Declaratory Judgment of Non-Infringement of the [‘506 Patent](#); and (4) Declaratory Judgment of Invalidity of the [‘506 Patent](#).¹⁰⁶

40. On April 22, 2009, FatPipe answered XRoads’ counterclaims denying all substantive allegations regarding infringement and invalidity.¹⁰⁷

¹⁰³ Opposition Memo at 27 (quoting 444 Memorandum at 24). FatPipe points out that XRoads’ device code includes terms such as “routeselect0” and “routeselect1.” Opposition Memo at 39. However, this does not mean XRoads’ devices contain a “router selector” as is claimed by the [‘143 Patent](#). A “router selector,” as claimed by the [‘143 Patent](#), includes the ability to route *subsequent* data packets through the device identified by the router selector; XRoads devices do not do this. XRoads devices select a router initially (hence, the code includes terms such as “routeselect0” and “routeselect1”), but the initial assignment of a router does not change during transmission of subsequent data packets. *See* French Decl. at 17-20.

¹⁰⁴ Opposition Memo at 31 (quoting 444 Memorandum at 26-27). FatPipe does not oppose this statement of fact. Instead, it argues that “infringement does not require a non-encrypted network; two networks having different forms of encryption will suffice.” Opposition Memo at 31. No facts are provided by FatPipe to show that XRoads devices indeed do permit simultaneous parallel transmission of encrypted and non-encrypted data.

¹⁰⁵ Complaint for Patent Infringement, [docket no. 1](#), filed February 27, 2009.

¹⁰⁶ Defendant/Counterclaim Plaintiff XRoads Networks, Inc.’s Answer, Affirmative Defenses and Counterclaims at 6-8, [docket no. 4](#), filed March 31, 2009.

¹⁰⁷ Reply to Counterclaim, [docket no. 7](#), filed April 22, 2009.

Claim Construction

41. Due to multiple discovery disputes,¹⁰⁸ the original scheduling deadlines were delayed. Accordingly, the claim construction briefing, which was originally scheduled to take place in January and February 2010,¹⁰⁹ did not take place until September 2011, and the claim construction hearing (the “*Markman* Hearing”) did not take place until December 12, 2011.

42. After the *Markman* Hearing was held, a Report and Recommendation on Claim Construction was issued defining the disputed terms of the ‘143 Patent and the ‘506 Patent.¹¹⁰

43. The definitions contained in the Report and Recommendation were adopted by the district court on March 16, 2012.¹¹¹

XRoads’ 444 Motion for Summary Judgment

44. On March 6, 2012, XRoads filed “Defendant’s Notice of Cross-Motion and Cross-Motion for Summary Judgment and/or Partial Summary Judgment on All Claims for Relief and/or All Issues of Liability Asserted by Plaintiff [sic] Fatpipe Networks, Ltd.” (“444 Motion”).¹¹²

45. On April 19, 2012, FatPipe made three filings in response to XRoads’ 444 Motion: (1) a Motion to Strike the Declaration of Daren French, which was filed in support of

¹⁰⁸ See Minute Entry, docket no. 34 (telephonic hearing regarding deposition disputes), held August 26, 2009; Motion to Compel Production of Source Code, [docket no. 37](#), filed September 3, 2009; Minute Entry, docket no. 39 (telephonic hearing regarding deposition disputes), held September 4, 2009; Motion to Compel Production of Open Source Software, [docket no. 43](#), filed September 9, 2009; Motion to Compel Responses, [docket no. 61](#), filed October 20, 2009; Motion to Strike, [docket no. 81](#), filed November 18, 2009; Motion for Hearing, [docket no. 91](#), filed November 23, 2009; Motion to Compel Inspection, [docket no. 121](#), filed January 20, 2010; Motion for Attorney Fees, [docket no. 122](#), filed January 22, 2010; Motion to Strike, [docket no. 124](#), filed January 22, 2010; Motion for Protective Order, [docket no. 149](#), filed February 26, 2010; Motion to Compel, [docket no. 155](#), filed March 3, 2010; Motion to Quash, [docket no. 169](#), filed March 23, 2010; Motion for Temporary Restraining Order, [docket no. 209](#), filed June 10, 2010; Motion for Protective Order, [docket no. 221](#), filed July 9, 2010; Motion for Sanctions, [docket no. 301](#), filed April 8, 2011.

¹⁰⁹ Scheduling Order, [docket no. 16](#), filed June 15, 2009.

¹¹⁰ See generally Claim Construction Order.

¹¹¹ Order, [docket no. 460](#), filed March 16, 2012.

¹¹² 444 Motion.

XRoads' 444 Motion ("479 Motion to Strike");¹¹³ (2) a motion under [Fed. R. Civ. P. 56\(d\)](#) "because facts essential to FatPipe's response are unavailable;" ("481 Motion under [Rule 56\(d\)](#)")¹¹⁴ and (3) a Cross-Motion for Summary Judgment ("483 Cross-Motion").¹¹⁵

46. FatPipe also moved to strike XRoads' 444 Motion,¹¹⁶ but that motion was denied in November 2013.¹¹⁷

47. On November 29, 2013, FatPipe filed a motion to reopen the record on XRoads' 444 Motion.¹¹⁸ The motion to reopen was granted in part and denied in part.¹¹⁹ FatPipe was allowed to file a supplemental memorandum on or before August 29, 2014, and XRoads was allowed to file a response on or before September 12, 2014. After each party made its filing, FatPipe objected to XRoads' response¹²⁰ and XRoads responded to the objections.¹²¹

SUMMARY JUDGMENT STANDARD

Summary judgment is appropriate if "there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law."¹²² A factual dispute is genuine when "there is sufficient evidence on each side so that a rational trier of fact could resolve the issue either way."¹²³ In determining whether there is a genuine dispute as to material fact, the court

¹¹³ 479 Motion to Strike.

¹¹⁴ 481 Motion under [Rule 56\(d\)](#).

¹¹⁵ 483 Cross-Motion.

¹¹⁶ Plaintiff's Motion to Strike Defendant's Motion for Summary Judgment [Dkt. No. 444] and Supporting Evidence, [docket no. 570](#), filed October 18, 2013.

¹¹⁷ Interim Case Management Order, [docket no. 581](#), entered November 14, 2013.

¹¹⁸ 583 Motion to Reopen.

¹¹⁹ Docket Text Order, docket no. 610, entered August 14, 2014.

¹²⁰ DUCivR7-1(b)(1)(B) Objections of FatPipe to the Purported Evidence and Response of Defendant XRoads Networks [Dkt. No. 614], [docket no. 615](#), filed September 19, 2014.

¹²¹ Response of Defendant XRoads Networks to Plaintiff's Evidentiary Objections, [docket no. 617](#), filed September 22, 2014.

¹²² [Fed. R. Civ. P. 56\(a\)](#).

¹²³ [Adler v. Wal-Mart Stores, Inc.](#), 144 F.3d 664, 670 (10th Cir. 1998).

should “view the factual record and draw all reasonable inferences therefrom most favorably to the nonmovant.”¹²⁴ The moving party “bears the initial burden of making a prima facie demonstration of the absence of a genuine issue of material fact and entitlement to judgment as a matter of law.”¹²⁵ Once the moving party has made the initial showing, the nonmoving party must come forward with admissible evidence in order to raise a genuine issue of material fact or demonstrate that the movant is not entitled to judgment as a matter of law.¹²⁶

Here, XRoads must make a prima facie demonstration of the absence of a genuine issue of material fact and entitlement to judgment as a matter of law. If XRoads makes that initial showing, FatPipe must demonstrate that XRoads is not entitled to judgment as a matter of law by raising a genuine issue of material fact with admissible evidence.

DISCUSSION

XRoads argues it is entitled to summary judgment for two reasons—(I) because its devices do not infringe FatPipe’s patents and (II) because FatPipe’s patents are invalid. Specifically, XRoads argues that (I.A.) its devices do not literally infringe on FatPipe’s patents, (I.B.) do not infringe under the doctrine of equivalents, and (I.C.) do not induce infringement.¹²⁷ XRoads also argues that FatPipe’s patents are invalid because they are nonsensical and lack use.¹²⁸ Each of XRoads’ arguments will be discussed in turn below.

¹²⁴ [*Id.*](#)

¹²⁵ [*Id.* at 670-71.](#)

¹²⁶ [*Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249 \(1986\).](#)

¹²⁷ 444 Motion at 2-3.

¹²⁸ 444 Memorandum at 3, 39-40.

I. Infringement

Infringement or non-infringement is based on a “two-step analysis.”¹²⁹ “First, the meaning and scope of any disputed terms and limiting expressions in the claims are determined as a matter of law. [Second,] the claims as construed are applied to the accused device or method, a question of fact.”¹³⁰ The first step in the analysis is mostly complete because claim construction has already taken place.¹³¹ This Memorandum Decision and Order deals only with the second step—applying the construed claims to the accused device or method. To the extent undefined terms remain, this Memorandum Decision and Order explains the meaning and scope of those terms. “The plaintiff has the burden of proving infringement by a preponderance of the evidence.”¹³²

A. Literal Infringement

For literal infringement to exist, the accused device must exactly mimic the claimed invention.¹³³ That is, XRoads devices must exactly mimic the FatPipe technology. “If even a single limitation is not present in the accused device, literal infringement does not exist as a matter of law.”¹³⁴

Here, XRoads claims there is “no evidence that XRoads’ devices literally do everything the Fatpipe [sic] Patents teach in exactly the same way, which alone is dispositive of literal

¹²⁹ [Vivid Techs., Inc. v. Am. Science & Eng’g, Inc.](#), 200 F.3d 795, 803 (Fed. Cir. 1999).

¹³⁰ *Id.* (citing [Markman v. Westview Instruments, Inc.](#), 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff’d*, 517 U.S. 370 (1996)).

¹³¹ See generally Claim Construction Order.

¹³² [Kegel Co., Inc. v. AMF Bowling, Inc.](#), 127 F.3d 1420, 1425 (Fed. Cir. 1997).

¹³³ [Utah Med. Prods. v. Clinical Innovations Assocs.](#), 79 F.Supp.2d 1290, 1298 (D.Utah 1999) (“To establish a literal infringement, a plaintiff must demonstrate that every limitation in the claim is literally met by the accused device.”).

¹³⁴ [Little Giant Pump Co. v. Diversitech Corp.](#), 505 F.Supp.2d 1107, 1110 (W.D. Okla. 2007).

infringement.”¹³⁵ XRoads is correct. There is no literal infringement of either the [‘143 Patent](#) or the [‘506 Patent](#).

(1) There Is No Literal Infringement of the [‘143 Patent](#) Because the [‘143 Patent](#) Modifies SYN Packets, Whereas XRoads’ Devices Create New SYN Packets

The [‘143 Patent](#) includes a “SYN modifier.”¹³⁶ The term “SYN modifier” was defined in the Claim Construction Order as “a process or device which modifies a SYN packet or a SYN request after router selection and specifies the address of an identified router which was selected by the router selector.”¹³⁷ The SYN modifier provides “a SYN packet or SYN request which has been modified from conventional usage”¹³⁸ that “has within”¹³⁹ it a “physical address or an IP address of a network interface router which is identified by at least one such address.”¹⁴⁰ In other words, under the [‘143 Patent](#), a packet of data arrives at the SYN modifier, and the SYN modifier changes the packet of data to include the physical or IP address of an identified router, “each response specifying the address of an identified router which was selected by the router selector.”¹⁴¹ A device produced pursuant to the [‘143 Patent](#) does not *create* a *new* packet of data.

XRoads devices, on the other hand, *do* create new packets of data. This is confirmed by FatPipe’s expert, Dr. Kasera. He testified that the [‘143 Patent](#) teaches SYN *modification*,

¹³⁵ 444 Memorandum at 29-31.

¹³⁶ [‘143 Patent](#) col. 39 ls. 15-16, 27 (Claim 1).

¹³⁷ Claim Construction Order at 12.

¹³⁸ [Id.](#) at 12 (definition of “modified SYN request”).

¹³⁹ [Id.](#) at 13 (definition of “contain”).

¹⁴⁰ [Id.](#) at 12 (definition of “address of an identified router”).

¹⁴¹ [‘143 Patent](#) col. 39 ls. 28-30 (Claim 1).

whereas XRoads devices engage in SYN *creation*.¹⁴² The following exchange took place during

Dr. Kasera's deposition:

A. So the XRoads device creates a new TCP connection, so it creates a new TCP header.

Q. Does it create a new session?

A. It creates a new TCP session, correct.

Q. And the '[143 patent](#)' doesn't teach a new TCP session; is that accurate?

A. The '[143 patent](#)' does not explicitly start a new TCP session

. . .

Q. And the difference is that the XRoads proxy initiates a new session and creates a new SYN; is that accurate?

A. Yes.

Q. Whereas the '[143 Patent](#)' teaches that an existing SYN is modified; is that accurate?

A. Yes.

Q. Would it be accurate to say that the XRoads device does not actually change the SYN packet?

A. Yes.¹⁴³

Therefore, because FatPipe's expert agrees that the '[143 Patent](#)' includes a SYN modifier which *alters* instead of *creates* a packet of data, there is no literal infringement of the '[143 Patent](#)'.

(2) There Is No Literal Infringement of the '[506 Patent](#)' Because Unlike the XRoads' Devices, the '[506 Patent](#)' Transmits Data Simultaneously Over Encrypted and Non-Encrypted Networks

The '[506 Patent](#)' requires that data be transmitted along networks that are "at least partially in parallel and which differ in their respective security characteristics."¹⁴⁴ The Claim Construction Order explains that "at least partially in parallel" means that "at least two network interfaces are available to be used *at the same instant in time* at least for some of the time."¹⁴⁵ This means that FatPipe devices transmit data *simultaneously* over encrypted *and non-encrypted*

¹⁴² Kasera Dep. at 34:3-12 (testifying that '[143 Patent](#)' teaches that an *existing* SYN packet is modified, whereas in the XRoads devices, the XRoads proxy initiates a new session and creates a new SYN).

¹⁴³ *Id.* at 32:13-20, 34:3-12.

¹⁴⁴ '[506 Patent](#)' col. 11 ls. 26-28 (Claim 1); *see also id.* col. 12 ls. 30-32 (Claim 10).

¹⁴⁵ Claim Construction Order at 15 (emphasis added).

networks.¹⁴⁶ XRoads’ devices do not do this. XRoads’ expert explained that any attempt to bond an encrypted and unencrypted tunnel together in a partially parallel manner resulted in an error message stating that encryption cannot be configured on one tunnel without configuring encryption on another.¹⁴⁷ Further, all packets associated with a session using an XRoads device are routed via the same interface across the network. This process terminates a client session and establishes multiple new sessions where each specific session must traverse the same link.¹⁴⁸ In other words, all packets within a single data transmission must pass through the same link using XRoads’ technology; packets comprising a single data transmission are not scattered across multiple links.

FatPipe disagrees, arguing that “summary judgment involving non-equivalency is premature” because XRoads devices literally infringe FatPipe’s [‘506 Patent](#).¹⁴⁹ FatPipe argues that XRoads’ devices infringe by sending data over networks that have *different* forms of encryption—not just one network *with* encryption and one network *without* encryption.¹⁵⁰ The problem with this argument is twofold. First, FatPipe acknowledges that under the [‘506 Patent](#), encryption is applied to data on one network and no encryption is applied to data for another

¹⁴⁶ [‘506 Patent](#) col. 11 ls. 42-45 (stating that data packets in the second collection are sent over a “second path through the private network, *without* treating the data packets of the second collection with the supplemental security measure.” (emphasis added)); *id.* [col. 11 ls. 51-52](#) (stating that the supplemental security measure “is not applied” to the packets sent over the second network); *see also* Kasera Expert Report at 42 (“A path through a private network . . . might not be perceived vulnerable . . . and therefore the users of this path might be willing to *forgo encryption of data*” (emphasis added)).

¹⁴⁷ French Decl. at 32 (“[E]xamination of the XRoads appliances demonstrates that it is not even possible to configure encryption on one tunnel without configuring encryption on another.”).

¹⁴⁸ *Id.* at 20-23. FatPipe merely “disputes” these facts, but does not provide opposing facts to support its dispute. *See, e.g.*, Opposition Memo at 25. *See also* Kasera Expert Report at 16 (“The XRoads technology uses a TCP proxy When a client PC wishes to publicly access a web server, e.g., [www.cnn.com](#), it initiates a TCP connection to [www.cnn.com](#) by sending a TCP SYN segment . . . that goes only as far as the proxy. The proxy then initiates *another* TCP request by sending a *new* TCP SYN segment to the web server.” (emphasis added)).

¹⁴⁹ Opposition Memo at 31.

¹⁵⁰ *Id.*

network.¹⁵¹ Therefore, by FatPipe’s own admission, the [‘506 Patent](#) operates to send data through one network with encryption, and *with no encryption* on another network. Second, FatPipe does not address the “partially in parallel” language included in the [‘506 Patent](#). “At least partially in parallel” is defined in the Claim Construction Order as, with respect to networks, “available to be used at the same instant in time for at least some of the time.”¹⁵² XRoads’ devices do not do this. Dr. Kasera’s report shows that XRoads technology uses a proxy that establishes *new* connections, not *parallel* connections as is taught by the [‘506 Patent](#).¹⁵³ stated that FatPipe’s focus on *encryption* to the exclusion of “*partially in parallel*” falls short of showing literal infringement. The [‘506 Patent](#) claims a method that obtains “connections to at least two networks which are at least partially in *parallel and* which differ in their respective security characteristics.”¹⁵⁴ FatPipe has not shown XRoads devices operate in both of these ways.

Therefore, because one of the limitations of the [‘506 Patent](#) is that there is transmission of data along networks that are “at least partially in parallel and which differ in their respective security characteristics,” and because XRoads devices are not able to do this, there is no literal infringement of the [‘506 Patent](#).

B. Equivalent Infringement

“The doctrine of equivalents prohibits one from avoiding infringement liability by making only insubstantial changes and substitutions . . . which, although adding nothing, would

¹⁵¹ See Opposition Memo at 66.

¹⁵² Claim Construction Order at 14-15.

¹⁵³ Kasera Expert Report at 16 (stating that XRoads devices initiate *another* TCP request by sending a *new* TCP SYN segment—thereby creating a *new*, not a “parallel,” connection).

¹⁵⁴ [‘506 Patent](#) col. 11 ls. 26-28 (Claim 1).

be enough to take the copied matter outside the claim, and hence outside the reach of law.”¹⁵⁵

“Equivalency does not exist if an element of the patented invention is absent from the accused device, even if the accused device accomplishes the same result.”¹⁵⁶ Whether a difference is substantial depends on an objective standard viewed from the vantage point of one of ordinary skill in the relevant art.¹⁵⁷

To determine whether there is infringement under the doctrine of equivalents, the “essential inquiry” is whether “the accused product or process contain[s] elements identical or equivalent to each claimed element of the patented invention[.]”¹⁵⁸ “An analysis of the role played by each element in the context of the specific patent claim will . . . inform the inquiry as to whether a substitute element . . . plays a role substantially different from the claimed invention.”¹⁵⁹

Here, XRoads argues that its devices do not infringe under the doctrine of equivalents because the “all-elements” or “all-limitations” rule is not satisfied.¹⁶⁰ Under this rule, “the accused product or process [must] contain elements identical or equivalent to *each claimed element* of the patented invention.”¹⁶¹ XRoads argues that “[i]f an accused device is missing an equivalent element *to even one limitation recited in the asserted patent claim*, it cannot infringe

¹⁵⁵ [Pfizer Inc. v. Teva Pharmaceuticals U.S.A., Inc.](#), 882 F.Supp.2d 643, 711 (D.Del. 2012) (internal quotations omitted, alteration in original).

¹⁵⁶ *Mitek Surg. Prods., Inc. v. Arthrex, Inc.*, 21 F.Supp.2d 1309, 1316 (D.Utah 1998) *aff’d* 230 F.3d 1382 (Fed. Cir. 2000).

¹⁵⁷ [Hilton Davis Chem. Co. v. Warner-Jenkinson Co.](#), 62 F.3d 1512, 1519 (Fed. Cir. 1995).

¹⁵⁸ [Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.](#), 520 U.S. 17, 40 (1997).

¹⁵⁹ [Id.](#)

¹⁶⁰ 444 Memorandum at 32.

¹⁶¹ [Warner-Jenkinson](#), 520 U.S. at 39 (emphasis added).

under the doctrine of equivalents.”¹⁶² XRoads argues that there is at least one limitation in each of the asserted patents that is not present in or is substantially different from XRoads’ devices.¹⁶³

In determining motions for summary judgment based on equivalency, it is essential that the non-movant present *facts*, not just lawyers’ argument, opposing summary judgment. *AquaTex* is instructive.¹⁶⁴ In that case, the patentee, AquaTex Industries, Inc., sued a defendant for patent infringement under the doctrine of equivalents. The defendant moved for summary judgment, arguing it had not infringed the patent even though it admitted that the products in question accomplished virtually the same result.¹⁶⁵ In affirming summary judgment in favor of the defendant, the Federal Circuit noted that

AquaTex, in response to the motion for summary judgment of non-infringement, provided no particularized testimony from an expert or person skilled in the art that specifically addressed equivalents on a limitation-by-limitation basis; explained the insubstantiality of the differences between the patented method and the accused product; or discussed the function, way, result test. The only evidence presented by AquaTex on the issue of equivalents was the deposition testimony of Doug Frost, [the defendant’s] Chief Executive Officer. It is unclear that Frost was an expert. In any event Frost’s testimony only explained how the defendant’s product operated. It did not specifically address equivalents or compare [the defendant’s] product to the patented method on a limitation-by-limitation basis as required by *Texas Instruments*. . . . *In short, in opposing summary judgment, AquaTex only provided lawyer argument and generalized testimony about the accused product. It has failed to demonstrate a genuine issue of material fact that would prevent the grant of summary judgment.*¹⁶⁶

Here, as in *AquaTex*, FatPipe has provided plenty of opposing “lawyer argument and generalized testimony about the accused product,”¹⁶⁷ but not a significant amount of opposing *facts*. FatPipe must provide “particularized testimony from an expert or person skilled in the art

¹⁶² 444 Memorandum at 32 (emphasis in original) (citing [Little Giant, 505 F.Supp.2d at 1111](#)).

¹⁶³ 444 Memorandum at 32.

¹⁶⁴ [AquaTex Industries, Inc. v. Techniche Solutions, 479 F.3d 1320 \(Fed. Cir. 2007\)](#).

¹⁶⁵ [Id.](#) at [1325](#) (listing admitted similarities between products).

¹⁶⁶ [Id.](#) at [1329](#) (emphasis added) (citations and quotation marks omitted).

¹⁶⁷ [Id.](#)

that specifically addresse[s] equivalents on a limitation-by-limitation basis; explain[s] the insubstantiality of the differences between the patented method and the accused product; or discusse[s] the function, way, result test.” FatPipe has not done so with regard to either of the patents at issue. Importantly, XRoads’ expert, Mr. French, has pointed out that FatPipe’s expert, Dr. Kasera, “has completely failed to produce any evidence where [FatPipe was] able to demonstrate ANY legitimate infringement of either the [‘143](#) or [‘506 Patents](#).”¹⁶⁸ This is largely because Dr. Kasera “only used a single WAN (wide-area network) connection. He NEVER used two WAN links, which would have been required to demonstrate ANY infringement and/or confirm any equivalence.”¹⁶⁹ This is important because, by using only one WAN connection, “it would have been impossible to test any type of link load balancing or partially parallel data transmission across TWO or more networks[,]” which are limitations required by the [‘143 Patent](#) and the [‘506 Patent](#).¹⁷⁰ Because Dr. Kasera’s testing was not set up sufficiently to test for equivalency, his testimony and report largely fail to provide reliable evidence to contradict XRoads’ expert Mr. French.

(1) There Is No Equivalent Infringement of the [‘143 Patent](#)

The [‘143 Patent](#) claims a controller device that is comprised, at least in part, of a “SYN modifier which provides modified SYN requests”¹⁷¹ XRoads argues that its devices “simply do not have a ‘SYN Modifier,’ nor do they intercept and divert ongoing packet transmissions via use of a controller as is supposedly taught by the [‘143 Patent](#).”¹⁷² XRoads argues that its devices “do not modify or replace physical/MAC addresses after router selection as is purportedly taught

¹⁶⁸ French Decl. at 5 (emphasis in original).

¹⁶⁹ *Id.* at 5-6 (citing Kasera Expert Report at 42) (emphasis in original) (footnote omitted).

¹⁷⁰ French Decl. at 6 (emphasis in original) (footnote omitted).

¹⁷¹ [‘143 Patent](#) col. 39 l. 27.

¹⁷² 444 Memorandum at 2.

by the [‘143 Patent](#).’¹⁷³ Further, XRoads claims that its devices “are designed and function differently with other elements—like establishing multiple new transmission sessions whereas the [‘143 Patent](#) fails to mention or discuss any concept of ‘sessions.’”¹⁷⁴

In response, FatPipe initially asserts that summary judgment for XRoads would not be appropriate because it has a pending motion seeking summary judgment on the “full range of equivalents for the [‘143 Patent](#).”¹⁷⁵ However, the motion to which FatPipe refers¹⁷⁶ has been decided and denied.¹⁷⁷ Therefore, FatPipe’s argument regarding its pending motion is moot, and the key inquiry is whether XRoads should “be denied summary judgment of noninfringement because equivalency is in material dispute”¹⁷⁸ The essential question is whether XRoads devices contain elements “identical or equivalent to each claimed element” of the [‘143 Patent](#).¹⁷⁹ FatPipe advances two arguments,¹⁸⁰ both of which fail to create a genuine issue of material fact.

a) “After router selection”

FatPipe argues that summary judgment cannot be granted because the parties dispute what the term “after router selection” means.¹⁸¹ The term “after router selection” does not appear in any of the claims of the [‘143 Patent](#). Rather, it appears in the Claim Construction Order under the definition of “SYN modifier.”¹⁸² The term “SYN modifier” is unique to the [‘143 Patent](#).¹⁸³

¹⁷³ [Id.](#)

¹⁷⁴ [Id.](#)

¹⁷⁵ Opposition Memo at 7.

¹⁷⁶ Plaintiff FatPipe Networks’ Motion for Summary Judgment of Equivalents Availability for the [‘143 Patent](#), [docket no. 435](#), filed February 7, 2012.

¹⁷⁷ Memorandum Decision and Order Denying [435] FatPipe Networks’ Motion for Summary Judgment of Equivalents Availability for the [‘143 Patent](#) at 2, [docket no. 513](#), filed January 11, 2013.

¹⁷⁸ Opposition Memo at 7; [id.](#) at 52.

¹⁷⁹ [Warner-Jenkinson](#), 520 U.S. at 40.

¹⁸⁰ Opposition Memo at 79 (indicating “after router selection” and “SYN terms” as disputed).

¹⁸¹ Opposition Memo at 55.

¹⁸² Claim Construction Order at 11.

That is, a “SYN modifier” is not generally known to those of ordinary skill in the art. The definition of “SYN modifier” states in its entirety:

A “SYN modifier” is a process or device which modifies a SYN packet or a SYN request *after router selection* and specifies the address of an identified router which was selected by the router selector.¹⁸⁴

FatPipe claims that XRoads misinterprets the term “after router selection” by equating it with “after the standard routing process.”¹⁸⁵ FatPipe says XRoads’ interpretation is erroneous because “router selection can occur *before* the routing process forwards packets”¹⁸⁶ FatPipe contends this alleged error “will invade all other claims, because ‘SYN modifier’ appears in claim 1 of the [‘143 patent](#), the only independent claim of that patent. ‘SYN modifier’ is thus a limitation of every asserted claim of the [‘143 patent](#).”¹⁸⁷

A dispute as to the *meaning* of a claim term—or, as here, the meaning of a definition of one of the claim terms—is not an issue of *fact* that would prevent summary judgment because “[c]laim interpretation . . . is an issue of *law*, and a dispute respecting that legal issue does not preclude summary judgment.”¹⁸⁸ Instead, FatPipe must specifically identify *facts* that show how XRoads’ devices contain elements that are identical or equivalent to the term “after router selection” as used in the [‘143 Patent](#). That is, the question is whether the XRoads devices are so similar to the [‘143 Patent](#) in terms of *when* SYN modification occurs that they are equivalent to the [‘143 Patent](#). FatPipe does not do this, and therefore, fails to create a genuine issue of material fact that would prevent summary judgment.

¹⁸³ Opposition Memo at 12 (quoting 444 Memorandum at 12, providing no opposing facts).

¹⁸⁴ Claim Construction Order at 12 (emphasis added).

¹⁸⁵ Opposition Memo at 56.

¹⁸⁶ [Id.](#)

¹⁸⁷ [Id.](#)

¹⁸⁸ [Molinaro v. Fannon/Courier Corp.](#), 745 F.2d 651, 654 (Fed. Cir. 1984).

SYN modification in the [‘143 Patent](#) occurs after router selection.¹⁸⁹ Under the [‘143 Patent](#), the router identifier detects the routers connected to it so that when a packet of data arrives at the controller, the SYN modifier may change the address information in the packet to identify a different machine or router than the one originally selected, depending on load and other history kept in the controller.¹⁹⁰ The [‘143 Patent](#) teaches that SYN modification operates by trapping SYN requests and changing the IP or physical address information contained therein.¹⁹¹ After SYN modification, the physical address or the IP address contained in a “SYN request” may be different than the address that was contained in the original request.¹⁹² Thus, the [‘143 Patent](#) teaches modification, not creation, of existing SYN packets.¹⁹³

FatPipe has presented no evidence that XRoads’ devices engage in SYN modification at all, let alone engage in SYN modification at the same time FatPipe devices do so (“after router

¹⁸⁹ Opposition Memo at 12 (quoting 444 Memorandum at 12, providing no opposing facts). Although FatPipe argues that it “contends that router selection can occur before packets are forwarded as part of a routing process,” Opposition Memo at 12, there are two problems with this. First, a *contention* is not an *opposing fact*. FatPipe has not set forth opposing facts showing a dispute. Second, there is no support for FatPipe’s position. The Claim Construction Order, the patent claims, the specification, and the figures in the patents included in the Patent support the idea that SYN modification occurs “after router selection.” Thus, although “FatPipe contends that router selection can occur before packets are forwarded as part of a routing process,” Opposition Memo at 12, it is clear that SYN modification occurs *after* router selection, and there cannot be a “genuine” dispute of material fact on this point. If FatPipe’s interpretation were adopted, “SYN modifier” would be nonsensical since there would be nothing for the “SYN modifier” to modify.

¹⁹⁰ Opposition Memo at 10 (quoting 444 Memorandum at 11, providing no opposing facts).

¹⁹¹ [‘143 Patent](#) col. 8 l. 38 (“The controller 308 will trap the SYN request packet.”); [‘143 Patent](#) col. 23 ls. 63-67; [‘143 Patent](#) col. 38 ls. 1-9; [‘143 Patent](#) col. 39 l. 31 – col. 40. l. 15.

¹⁹² [‘143 Patent](#) col. 39 l. 31 to col. 40. l. 15.

¹⁹³ Opposition Memo at 11. FatPipe argues the [‘143 Patent](#) “does not necessarily require modification of an existing SYN packet or SYN segment,” but this defies the language in the claims, as well as the testimony of FatPipe’s own expert. The claims repeatedly refer to a “modified SYN request” that includes an IP or physical address of an “identified” machine or router “instead of” the machine or router that would have been selected under traditional network design. *E.g.*, [‘143 Patent](#) col. 39 ls. 31-37. A SYN request could not be “modified” if it did not already exist. Moreover, Dr. Kasera stated that “the SYN modifier makes available *modified SYN packets* where one or more fields/bits in the packet header (transport, network, or link layer) or bits in the payload (application, transport, network, or link layer) *have been modified* for various functions such as directing traffic to identified routers” Opposition Memo at 11 (quoting Kasera Expert Report at 9 (emphasis added)); *see also* [‘143 Patent](#) col. 39 l. 27 (“a SYN modifier which provides *modified SYN requests* . . .”) (emphasis added).

selection”). Instead, the evidence—including FatPipe’s own expert’s testimony¹⁹⁴— shows that under the [‘143 Patent](#), the outgoing data request is intercepted or “trapped”¹⁹⁵ and then modified to be redirected to the selected router. Under the XRoads’ model, a data request is not intercepted or trapped and then changed; rather, a new TCP session is initiated and a new SYN is created.¹⁹⁶

And although FatPipe lists several paragraphs discussing XRoads’ device code,¹⁹⁷ there is no explanation proving equivalency. For example, while FatPipe includes parts of XRoads’ code describing “multi-path routing,” there is no accompanying explanation of how “multi-path routing” is equivalent to the [‘143 Patent](#) elements—including the concept that “subsequent data requests” are routed through a different router than the one originally identified as the “first identified router.”¹⁹⁸ Also, FatPipe points out that XRoads’ device code includes terms such as “routeselect0” and “routeselect1.”¹⁹⁹ But this does not mean that XRoads’ devices engage in SYN modification at all, let alone SYN modification “after router selection.” In fact, once a router is selected by the standard routing process, XRoads devices do not reassign a router to subsequent packets of the same data transmission.²⁰⁰ Therefore, even though XRoads code includes terms such as “routeselect0” and “routeselect1,” there is no showing that this is equivalent to SYN modification “after router selection” as occurs in the [‘143 Patent](#).

¹⁹⁴ See Kasera Dep. at 34:3-12 (testifying that [‘143 Patent](#) teaches that an *existing* SYN packet is modified, whereas in the XRoads devices, the XRoads proxy initiates a new session and creates a new SYN).

¹⁹⁵ [‘143 Patent](#) col. 8 l. 38; *id.* col. 23 l. 64.

¹⁹⁶ Kasera Dep. at 34:3-12; *see also* French Decl. 14-15 (stating that XRoads devices do not modify physical addresses).

¹⁹⁷ Opposition Memo 39-44.

¹⁹⁸ [‘143 Patent](#) col. 39 ls. 14-30; *id.* col. [40 ls. 5-9](#).

¹⁹⁹ Opposition Memo at 39.

²⁰⁰ French Decl. at 20.

“Equivalency does not exist if an element of the patented invention is absent from the accused device, even if the accused device accomplishes the same result.”²⁰¹

Furthermore, the issue is not whether “router selection [occurs] before *routing*,” as FatPipe argues throughout its Opposition Memo.²⁰² The issue is whether router selection occurs before *SYN modification* because the [‘143 Patent](#) claims a “SYN modifier,” which is “a process or device which *modifies a SYN packet or a SYN request after router selection*.” Thus, the claim language shows, and the claim construction order explains, that *SYN modification* occurs “after router selection.”²⁰³ FatPipe therefore misses the mark by focusing on “router selection before *routing*” because the [‘143 Patent](#) does not claim a process that selects a router before *routing*; instead, it claims a process where *SYN modification* occurs *after router selection*. FatPipe does not indicate how the XRoads devices engage in *SYN modification* “after router selection,” and has specifically failed to identify facts that show XRoads’ devices contain elements that are identical or equivalent to the [‘143 Patent](#) as applied to the term “after router selection.”

To be sure, there is a substantial difference between XRoads’ devices and the [‘143 Patent](#). While both utilize some of the general concepts of routing,²⁰⁴ “routing” is not what makes the [‘143 Patent](#) unique. “SYN modification,” on the other hand, *is* unique to the [‘143 Patent](#) and is not part of the general “routing” process known in the art.²⁰⁵ Through SYN modification, data packets can be destined for a default gateway router, but be intercepted by a controller along the way and re-routed through a different router than the one originally assigned,

²⁰¹ [Mitek](#), 21 F.Supp.2d at 1316.

²⁰² Opposition Memo at 56-57 (arguing that XRoads devices infringe the [‘143 Patent](#) because XRoads codes, specifically `routing_menu/routeselect`, show “router selection before *routing*.”).

²⁰³ Claim Construction Order at 11-12 (definition of “SYN modifier”); see [‘143 Patent](#) col. 39 ls. 20-30 (describing router selection before SYN modification).

²⁰⁴ “Routing” is a process that determines the path a packet takes from source to destination. Kurose & Ross at 316.

²⁰⁵ French Decl. at 8.

depending on load.²⁰⁶ Thus, while XRoads' devices may incorporate general "routing" principles, they do not engage in "SYN modification" which is unique to the ['143 Patent](#). To establish similarity between XRoads' devices and the ['143 Patent](#), FatPipe would have to show that XRoads's devices engaged in *SYN modification, not just general "routing,"* "after router selection." FatPipe does not accomplish this by arguing that XRoads devices engage in "router selection before *routing*."

Because FatPipe has failed to provide particularized testimony from an expert or person skilled in the art addressing SYN modification "after router selection," it has failed to create a genuine issue of material fact, and summary judgment for XRoads on this point is granted.²⁰⁷

b) "SYN terms"

Next, FatPipe argues summary judgment is barred because there is a "material dispute" over the "meaning of the four 'SYN' terms."²⁰⁸ As noted above, however, a dispute as to the *meaning* of a claim term is not an issue of *fact* that prevents summary judgment.²⁰⁹ The Claim Construction Order clearly defined each of the "SYN terms,"²¹⁰ and the question for purposes of this motion is whether FatPipe has raised *facts* that prevent summary judgment. FatPipe has failed to do so.

Even though FatPipe argues that summary judgment is not warranted because of "XRoads' refusal" to accept the claim construction with regard to the SYN terms,²¹¹ there is no

²⁰⁶ ['143 Patent](#) col. 23 ls. 37-45.

²⁰⁷ See [AquaTex](#), 479 F.3d at 1329.

²⁰⁸ Opposition Memo at 59, 79 (arguing the "dispute [about] how to interpret the 'SYN' terms . . . prevent[s] summary judgment of ['143 patent](#) noninfringement"). The "SYN terms" are: "SYN packet;" "SYN request;" "modified SYN request;" and "SYN modifier." [Id.](#) at 59 n. 51.

²⁰⁹ [Molinaro](#), 745 F.2d at 654 ("Claim interpretation . . . is an issue of *law*, and a dispute respecting that legal issue does not preclude summary judgment.").

²¹⁰ Claim Construction Order at 11-12.

²¹¹ Opposition Memo at 59-60.

indication that this is true. In fact, XRoads refers to the Claim Construction Order several times in making arguments regarding the SYN terms.²¹² Furthermore, FatPipe's burden is to raise an issue of material *fact* that would preclude summary judgment, not to point out what claim constructions the opposing party has or has not agreed with. FatPipe has failed to carry its burden here. Rather than point to specific deposition testimony or other facts in the record, FatPipe argues that "SYN terms are disputed" as to the ['143 Patent'](#)²¹³ because "XRoads' interpretation conflicts with the claim construction"²¹⁴ and therefore, summary judgment is barred. FatPipe is incorrect that this is all it needs to do to avoid summary judgment. To the extent FatPipe argues that there is an issue regarding the "content of SYN packets,"²¹⁵ this argument is rejected since the Claim Construction Order has already defined the term "SYN packet."²¹⁶ Accordingly, FatPipe has failed to raise a genuine issue of material fact as to this issue, and summary judgment for XRoads on this point is warranted.

In summary, XRoads is correct that its devices do not equivalently infringe the ['143 Patent'](#). XRoads established a prima facie case²¹⁷ of noninfringement by setting forth facts and testimony in the record that show its devices are substantially different from the perspective of one with ordinary skill in the art. In response, FatPipe did not come forward with evidence to

²¹² 444 Memorandum at 6, 7, 15, 17.

²¹³ Opposition Memo at 59.

²¹⁴ [Id.](#) at 60-61.

²¹⁵ [Id.](#) at 62 ("XRoads' assertions create a genuine issue of material fact, namely, the content of SYN packets.").

²¹⁶ Claim Construction Order at 11 (defining "SYN packet" as "a controlled *unit* of data transmission in a packet-switched network.").

²¹⁷ [Adler, 144 F.3d at 670-71.](#)

raise a genuine issue of material fact.²¹⁸ Accordingly, XRoads is entitled to summary judgment that there is no equivalent infringement of the [‘143 Patent](#).²¹⁹

(2) There Is No Equivalent Infringement of the [‘506 Patent](#)

The [‘506 Patent](#) teaches “a method of preparing data for transmission” that sends data packets over “two networks which are at least partially in parallel and which differ in their respective security characteristics; . . . submitting the data packets of the second collection for transmission over a second path through the private network, *without* treating the data packets of the second collection with the supplemental security measure.”²²⁰ XRoads argues that infringement cannot be found because its devices cannot send information simultaneously over a network with encryption and a network without encryption, and because its devices have no need to “efficiently compensate” for packets as the [‘506 Patent](#) requires.²²¹

FatPipe argues in opposition that summary judgment cannot be granted for XRoads as to equivalency of the [‘506 Patent](#) because there is a dispute between the parties about the meaning of “supplemental security measure,” “partially in parallel,” and “efficiently compensate.”²²² Again, however, a dispute over the *meaning* of a claim term is not an issue of *fact* that would prevent summary judgment.²²³ To avoid summary judgment, FatPipe must provide more than “lawyer argument and generalized testimony”²²⁴ that the parties disagree on the meaning of terms and argue that “[t]he facts needed to understand ‘efficient compensation,’ ‘supplemental

²¹⁸ [Anderson](#), 477 U.S. at 249.

²¹⁹ [Fed R. Civ. P. 56\(a\)](#); *see also Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986).

²²⁰ [‘506 Patent](#) col. 11 ls. 26-46 (Claim 1) (emphasis added).

²²¹ Opposition Memo at 31; French Decl. at 38-41.

²²² Opposition Memo at 79.

²²³ [Molinaro](#), 745 F.2d at 654 (“Claim interpretation . . . is an issue of *law*, and a dispute respecting that legal issue does not preclude summary judgment.”).

²²⁴ [AquaTex](#), 479 F.3d at 1329; *see* Opposition Memo at 62-67 (failing to cite particularized testimony from an expert or one skilled in the art supporting FatPipe’s argument that there is a genuine issue of material fact).

security measure,’ and ‘partially in parallel’ can be determined at trial.”²²⁵ FatPipe must show that XRoads’ position is disputed by facts or testimony from the record.

a) “Supplemental Security Measure” and “Partially In Parallel”

FatPipe’s counsel argues that although “[t]he [‘506 Patent](#) specifically recognizes that different kinds or levels of encryption can be applied to the two networks[,]”²²⁶ this does not necessarily mandate that one network is encrypted and the other network is entirely unencrypted.²²⁷ Without citation to facts in the record, FatPipe argues that it is possible under some embodiments to “apply one kind of encryption to the data for one network and apply *a different kind or strength* of encryption to the data for another network.”²²⁸ Thus, FatPipe’s counsel argues, XRoads’ “all-or-nothing” approach, which posits that either both or neither of the networks must be encrypted, should be rejected. However, as stated above, FatPipe fails to point to any testimony, affidavit, or other factual evidence contradicting XRoads’ expert’s statements that the [‘506 Patent](#) requires encryption to one tunnel and no encryption to the other.

Moreover, FatPipe acknowledges that under the [‘506 Patent](#), “[s]ome embodiments do indeed apply encryption to data for one network and *not apply any encryption* to data for another network.”²²⁹ Although FatPipe couches this concession in terms of “some embodiments,” a review of Claim 1—an independent claim of the [‘506 Patent](#)—shows that the [‘506 Patent](#) claims a method that encrypts one network *but not the other*. Claim 1 provides that data packets are sent:

²²⁵ Opposition Memo at 51.

²²⁶ [Id.](#) at 66.

²²⁷ [Id.](#) at 65-66.

²²⁸ [Id.](#) at 66 (emphasis added).

²²⁹ [Id.](#) (emphasis added).

over a second path through the private network, *without* treating the data packets of the second collection with the supplemental security measure²³⁰

and that the supplemental security measure:

is not applied before transmission to data packets that are to be transmitted over another network.²³¹

These clauses from Claim 1 clearly support XRoads' position that the ['506 Patent](#) requires encryption to one path and no encryption to a second path. FatPipe provides nothing more than argument from counsel to refute this.

In addition, the prosecution history described by XRoads supports the argument that the ['506 Patent](#) claims encryption to one path and no encryption to a second path. XRoads explains that the ['506 Patent](#) was originally rejected due to obviousness because “[t]he ability to provide increased speed through parallel networking across two networks, either public or private links, is not something which was unique when Fatpipe filed its ['506 Patent](#).”²³² Thus, FatPipe had to amend its claims to show that the ['506 Patent](#) was not claiming simply the use of two networks with the same security characteristics to transmit data—rather, the ['506 Patent](#) transmitted data over two networks with different security and had to account for “differences in network security during transmission over parallel networks.”²³³ This is a key element of the patent and shows that the ['506 Patent](#) must include the concept of two network paths *with differing security characteristics*—i.e., one encrypted and one non-encrypted—in order to be novel.

²³⁰ ['506 Patent](#) col. 11, ls. 44-46 (emphasis added).

²³¹ *Id.* col. 11, ls. 50-54 (emphasis added).

²³² French Decl. at 41.

²³³ French Decl. at 42; French Decl. at 42 n.58 (explaining that claims in the ['506 Patent](#) were amended to include terms such as “which differ in their respective security characteristics,” “lower security of the first network,” and “lower security than the internet”).

As defined by the Claim Construction Order, a “supplemental security measure” requires “at least encryption.”²³⁴ The limitation that requires a “supplemental security measure” on a “second network” in the [‘506 Patent](#)²³⁵ is not present in the XRoads devices.²³⁶ Thus, because the XRoads devices cannot send data packets over two networks partially in parallel if one of those networks is encrypted and the other is not encrypted, the XRoads devices do not “contain elements identical or equivalent to each claimed element of the patented invention”²³⁷ and there is no equivalent infringement of the [‘506 Patent](#) as it relates to the terms “supplemental security measure” and “partially in parallel.”

b) “Efficient Compensation”

XRoads also argues that its devices do not infringe because they “have no method to perform ‘efficient compensation’ to account for out-of-order packets”²³⁸ XRoads argues that “efficient compensation” is a component of the [‘506 Patent](#), and it restores or “resequences” packets to their original order to avoid “consistently forced retries.”²³⁹ FatPipe disagrees, and argues that XRoads misunderstands the term “efficient compensation.”²⁴⁰ FatPipe argues that

the “efficiency” in question is efficiency gained by avoiding processing overhead, an efficiency which is obtained by selectively encrypting data instead of performing encryption even when the data is already sufficiently secure. The “compensation” in question is not compensation for jitter and out-of-order packets, as XRoads alleges, but is instead compensation for the “difference in respective security characteristics” of the networks.”²⁴¹

²³⁴ Claim Construction Order at 14 (definition of “supplemental security measure”).

²³⁵ [‘506 Patent](#), col. 11 ls. 33-35.

²³⁶ French Decl. at 31-33 (explaining that “examination of the XRoads appliances demonstrates that it is not even possible to configure encryption on one tunnel without configuring encryption on another”).

²³⁷ [Warner-Jenkinson](#), 520 U.S. at 40.

²³⁸ 444 Memorandum at 31.

²³⁹ [Id.](#); French Decl. at 39.

²⁴⁰ Opposition Memo at 64.

²⁴¹ [Id.](#) (citing [‘506 Patent](#), Claim 1).

There are two problems with FatPipe's argument. First, as with many of the previous arguments FatPipe has made in opposition to XRoads' motion, this argument is unsupported by any *evidence*. Instead, only lawyer argument is provided.²⁴² Second, FatPipe's argument does not address XRoads' contention that "efficient compensation" was required to be added to the ['506 Patent](#) in order for the ['506 Patent](#) to issue.

Pointing to the prosecution history of the ['506 Patent](#), XRoads explains that to obtain approval, a limitation was added to the claims to reflect that "efficient compensation" was necessary to "compensate for the differences in network security"²⁴³ *Independent* Claim 10 and *independent* Claim 22 incorporate this idea into the ['506 Patent](#), claiming a controller that "efficiently compensate[s]" for lower network security in one line of transmission.²⁴⁴ This means that the ['506 Patent](#) necessarily includes the concept of "efficient compensation."

Even accepting FatPipe's premise that "[t]he 'compensation' in question is not compensation for jitter and out-of-order packets, as XRoads alleges, but is instead compensation for the 'difference in respective security characteristics' of the networks,"²⁴⁵ FatPipe has given no facts to show that sending data over networks with different security characteristics does not in fact result in out-of-order packets. XRoads has made that claim and supported it with expert testimony. Therefore, FatPipe fails to raise a genuine issue of material *fact* that rebuts XRoads' prima facie case, and XRoads' argument that "efficient compensation" is the ability to

²⁴² See, e.g. Opposition Memo at 64 (providing lawyer argument, citations to cases, and patent language).

²⁴³ See French Decl. at 42 ("The claims presented here also require supplemental security which is **calculated to efficiently compensate for differences in network security during transmission over parallel networks**, a requirement that is not taught by Bottle and Datta.") (emphasis by French) (quoting PTO Amendment 3003.2.14B at 15).

²⁴⁴ ['506 Patent](#) col. 12 ls. 31-32; *id.* col. 13 l. 45 to col. 14 l. 1.

²⁴⁵ Opposition Memo at 64 (citing ['506 Patent](#), Claim 1).

“resequence packets” and maintain “path quality”²⁴⁶ is accepted because it is supported throughout the language and figures of the [‘506 Patent](#). Because XRoads devices do not have resequencing or “efficient compensation” capabilities,²⁴⁷ and have no need to do so since they do not send data partially in parallel over separate networks with differing security characteristics, the [‘506 Patent](#) is not equivalently infringed by XRoads.

(3) Conclusion: There is No Equivalent Infringement of Either the [‘143 Patent](#) or the [‘506 Patent](#)

FatPipe’s main contention throughout its Opposition Memo is that summary judgment cannot be granted as to equivalent infringement because the parties disagree as to the meaning of certain phrases within the Claim Construction Order. But disagreements about the *meaning* of claim terms are issues of law, not issues of fact, and such disagreements do not prevent summary judgment. There are sufficient facts in the record to support XRoads’ arguments, and FatPipe has failed to create a genuine issue of material fact to preclude summary judgment in favor of XRoads with regard to equivalent infringement.

Additionally, although FatPipe’s expert Dr. Kasera testified that the XRoads devices were “equivalent” to the patents at suit, Dr. Kasera also testified that he did not have an understanding of the *legal doctrine of equivalence*, and when he used the word “equivalent” in his conclusions he was merely stating that the XRoads devices used “[s]imilar methods to achieve similar results.”²⁴⁸ However, “similar” methods and results do not mandate a conclusion of equivalency.²⁴⁹ The important consideration is the substantiality of the differences “on a

²⁴⁶ French Decl. at 39-40 (describing relationship between “efficient compensation” and “path quality”/ “resequencing”).

²⁴⁷ 444 Memorandum at 30; French Decl. at 38-39.

²⁴⁸ Kasera Dep. at 29:1.

²⁴⁹ [AquaTex](#), 479 F.3d at 1325 (listing admitted similarities between products, but concluding patent was not infringed under the doctrine of equivalents); [Mitek](#), 21 F.Supp.2d at 1316 (“Equivalency does not exist if an element

limitation-by-limitation basis.”²⁵⁰ For the reasons noted above, there is no equivalent infringement because XRoads has shown there is a substantial difference between its devices and FatPipe’s patents. Accordingly, XRoads is entitled to summary judgment because its devices do not infringe either the [‘143 Patent](#) or the [‘506 Patent](#) under the doctrine of equivalents.

C. Inducing Infringement

XRoads’ entire argument regarding inducing infringement consists of one statement declaring: “All Claims for Relief for inducing infringement fail because no infringement exists.”²⁵¹ There is no further argument from *either party* regarding inducing infringement.

“[I]nduced infringement under § 271(b) requires knowledge that the induced acts constitute infringement” of the asserted patent.²⁵² For FatPipe to succeed on an argument for inducing infringement, FatPipe must show that XRoads had knowledge of FatPipe’s patents, and had specific intent to induce acts it knew would infringe the asserted patents—as opposed to simply having the intent to induce acts that happen to infringe.²⁵³ FatPipe has not challenged XRoads’ argument that it has not induced infringement; therefore, even though XRoads’ argument regarding induced infringement is conclusory, XRoads’ motion for summary judgment for inducing infringement is granted because it is unchallenged. Also, summary judgment is granted in favor of XRoads because no evidence is presented that XRoads induced acts it knew would infringe the asserted patents.

of the patented invention is absent from the accused device, even if the accused device accomplishes the same result.”).

²⁵⁰ [AquaTex](#), 479 F.3d at 1329.

²⁵¹ 444 Memorandum at 3.

²⁵² [Global-Tech Appliances, Inc. v. SEB S.A.](#), 131 S.Ct. 2060, 2068 (2011).

²⁵³ [Id.](#)

D. Conclusion: Summary Judgment In Favor of XRoads is Granted As To Infringement

Because XRoads set forth a prima facie case for infringement, and FatPipe failed to raise a genuine issue of material fact or demonstrate that XRoads is not entitled to judgment as a matter of law, summary judgment as to infringement is GRANTED in favor of XRoads.

II. Invalidity

In addition to noninfringement arguments, XRoads also argues that summary judgment should be granted because the [‘143 Patent](#) and the [‘506 Patent](#) are invalid.²⁵⁴ FatPipe disagrees, arguing that summary judgment as to invalidity is inappropriate because XRoads failed to address invalidity “on a claim by claim basis,”²⁵⁵ failed to consider “every claim limitation,”²⁵⁶ and failed to “acknowledge non-asserted claims.”²⁵⁷ FatPipe also contends that XRoads has failed to overcome the presumption of patent validity.²⁵⁸

Patents are presumed valid, and each claim of a patent is presumed valid “independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim.”²⁵⁹ The presumption of validity can be overcome only by clear and convincing evidence.²⁶⁰ “The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.”²⁶¹

²⁵⁴ 444 Motion at 2-3; 444 Memorandum at 35-40.

²⁵⁵ Opposition Memo at 53.

²⁵⁶ *Id.* at 54.

²⁵⁷ *Id.* at 53.

²⁵⁸ *Id.* at 52.

²⁵⁹ [35 U.S.C. § 282](#).

²⁶⁰ [Microsoft Corp. v. i4i Limited Partnership](#), 131 S.Ct. 2238, 2242 (2011).

²⁶¹ [35 U.S.C. § 282](#).

A. '143 Patent

XRoads argues the '143 Patent is invalid—that it is “not enabled” under 35 U.S.C. § 112 ¶ 1 and “lacks utility” under 35 U.S.C. § 101—because it contains “nonsensical and impossible” limitations.²⁶² XRoads’ main contention is that the '143 Patent “fails to describe how a SYN request could ‘contain’ the IP address or the physical address”²⁶³ and “does not explain how modifying a SYN request could change an IP address or physical address.”²⁶⁴ According to XRoads’ expert, it is impossible for a physical address to be *contained* within a “SYN request” or “SYN packet” as required by claim 1 of the '143 Patent²⁶⁵ and therefore it is “impossible to modify a physical address by modifying the SYN value or any other fields within either layer 3 or 4 of the TCP/IP protocol stack.”²⁶⁶ XRoads’ expert takes the position that the '143 Patent errs when it says that “a physical and/or MAC address [is modified] *within a TCP SYN segment* instead of *within a frame header*.”²⁶⁷ Therefore, according to XRoads, “[t]he 143 Patent is literally nonsensical to one knowledgeable in the art of networking protocols.”²⁶⁸

FatPipe counters that “XRoads’ invalidity arguments regarding the addresses contained in SYN packets were briefed, and they were argued at the Markman hearing. The arguments were already considered, and they were rejected.”²⁶⁹ FatPipe is correct. The Claim Construction Order

²⁶² 444 Memorandum at 37.

²⁶³ Id. at 36.

²⁶⁴ Id. at 36-37.

²⁶⁵ French Decl. at 3.

²⁶⁶ 444 Memorandum at 39.

²⁶⁷ French Decl. at 2 (emphasis added).

²⁶⁸ 444 Memorandum at 39.

²⁶⁹ Opposition Memo at 61.

explains that any reference to address modification within a TCP header is a mistake that does not invalidate the [‘143 Patent](#).²⁷⁰

Moreover, the Court’s definition of “SYN packet” (and “SYN request”) clarifies that a “SYN packet” or “SYN request” is a *packet* or a *unit* of data that is not confined to a single bit, flag, header, message, segment, datagram, or layer. Rather, a “SYN packet” is a “controlled *unit* of data transmission in a packet-switched network.”²⁷¹ As data from upper layers becomes encapsulated in lower layers, it is compiled into a single “frame” at the Network Access Layer, where it can be sent along the network.²⁷² When a “SYN request” or a “SYN packet” is sent,²⁷³ an entire *unit or packet* of information is transmitted. This means that when a SYN request or SYN packet is sent, it is packaged into data and headers, sent to lower layers, and is ultimately sent as a frame with a frame header.²⁷⁴ Therefore, when Claim 1 of the [‘143 Patent](#) states that a SYN modifier “provides modified SYN requests that contain the address of an identified router,”²⁷⁵ this is possible because a SYN request—in its entirety—includes the entire *unit or packet* of information with source and destination addresses. A “SYN request” or a “SYN packet” therefore “contains” address information, even though when broken down into discrete parts it is more precise to say that the address information is contained in a *frame header*.

²⁷⁰ Claim Construction Order at 10-11 (“The specification’s reference to address information within the TCP header *is an error*. There is no address information in a TCP header. This is apparent to a knowledgeable reader; particularly in view of the language in the Claims regarding the modifications of addresses. XRoads knows it is an obvious error An error in a patent specification that is easily detectable by anyone skilled in the art does not invalidate a patent.” (emphasis added)) (footnotes omitted) (citing [PPG Indus., Inc. v. Guardian Indus. Corp.](#), 75 F.3d 1558, 1564 (Fed. Cir. 1996)).

²⁷¹ Claim Construction Order at 11 (emphasis added).

²⁷² Casad at 27.

²⁷³ Kurose & Ross at 264-65 (explaining that a TCP SYN segment is created at the Transport Layer and then “encapsulated within an IP datagram” at the Internet Layer before being sent during TCP connection).

²⁷⁴ See Kurose & Ross at 27.

²⁷⁵ [‘143 Patent](#) col. 39 ls. 27-28.

As explained previously in this decision, “SYN modification” is unique to the [‘143 Patent](#) and is not part of the general “routing” process known in the art. This is recognized by XRoads’ expert.²⁷⁶ Through SYN modification, data packets can be destined for a default gateway router, but be intercepted by a controller along the way and re-routed to a router other than the default gateway router, depending on load.²⁷⁷ This is a new and novel concept, and although XRoads is correct that the PTO *initially* rejected all claims of [‘143 Patent](#) for obviousness, FatPipe amended the rejected claims and the patent was eventually issued.²⁷⁸ Once the patent was issued, it was entitled to a presumption of validity that can only be overcome by clear and convincing evidence.²⁷⁹ XRoads has not brought forth clear and convincing evidence to show that the [‘143 Patent](#) is not novel or not enabled. Accordingly, summary judgment is denied with regard to XRoads’ argument that the [‘143 Patent](#) is invalid.

XRoads’ argument that the [‘143 Patent](#) is “based on prior art” and “open source technology available well before Fatpipe’s Patents”²⁸⁰ is rejected as well. XRoads has not shown that the claims of the [‘143 Patent](#) are so similar to prior art to warrant a finding of invalidity. Nor has XRoads shown that the prior art cutoff date is established.²⁸¹ XRoads therefore fails to carry its burden. Summary judgment as to invalidity of the [‘143 Patent](#) is DENIED.

²⁷⁶ French Decl. at 8-9 (“[T]he term ‘SYN modifier’ is not a standard industry term nor is it used within the industry to describe any aspect of the standard routing process.”).

²⁷⁷ [‘143 Patent](#) col. 23 ls. 37-45.

²⁷⁸ French Decl. at 10

²⁷⁹ [Microsoft Corp.](#), 131 S.Ct. at 2242.

²⁸⁰ 444 Memorandum at 39.

²⁸¹ Opposition Memo at 26.

B. '506 Patent

XRoads further argues that the '506 Patent should be invalidated because Claims 1-9 “lack use” and are not enabled.²⁸² Specifically, XRoads contends that “attempting to send packets over both an encrypted and non-encrypted network causes a high degree of jitter and out-of-order packets,”²⁸³ which leads to problematic streaming of applications and “consistently forced retires.”²⁸⁴ This creates the need for the “‘efficient compensation’ capabilities as included in claim 10 of the '506 Patent,” according to XRoads’ expert.²⁸⁵ However, since “efficient compensation” is not mentioned in any other claims than claim 10, XRoads argues, the '506 Patent “should be found inoperable and invalid.”²⁸⁶

FatPipe, on the other hand, argues that the '506 Patent is valid *even without* the terms “efficient compensation,” “resequencing,” and “path quality” woven into *every* claim. FatPipe acknowledges that the term “efficiently compensate” appears only in claims 10 and 22, and that similar terms “resequencing” and “path quality” appear in the figures in the specification and elsewhere, but argues the terms are “not required except where specifically recited.”²⁸⁷ In other words, according to FatPipe, the terms need not appear in every claim.²⁸⁸

To be sure, the term “efficient compensation” is included in independent Claim 10 and independent Claim 22. Thus, independent claims 10 and 22, and dependent claims 11-21 and 23-25 include the concept of efficient compensation, and XRoads’ invalidity argument fails with

²⁸² 444 Memorandum at 39-40.

²⁸³ Id. at 38; French Decl. at 39.

²⁸⁴ 444 Memorandum at 38.

²⁸⁵ French Decl. at 5.

²⁸⁶ 444 Memorandum at 40.

²⁸⁷ Opposition Memo at 63.

²⁸⁸ Id. at 63-64 (“References to resequencing and path quality in the specification text and Figures do not mandate the presence of those items in every claim of the patent.”).

respect to those claims. The question is whether Claims 1-9 should be invalidated due to the fact that independent Claim 1 contains no statement of “efficient compensation.”

As FatPipe points out, “efficient compensation,” while an important component of the [‘506 Patent](#), does not have to appear in every independent claim for the Patent to be valid. Even if XRoads is correct, and the absence of “efficient compensation” would result in “a high degree of jitter and out-of-order packets,”²⁸⁹ or “consistently forced retries,”²⁹⁰ it is not certain that the [‘506 Patent](#) would be rendered *inoperable* by such disruptions. Thus, while XRoads has raised doubts about the quality of the process under the [‘506 Patent](#), it has failed to show clear and convincing evidence that the claims are *invalid* by lack of implementation or lack of utility. Raising doubts as to the quality of Claims 1-9 does not establish invalidity. Indeed, showing that XRoads products work better than FatPipe’s because XRoads devices do not incorporate the same technology (such as “efficient compensation”) does not show invalidity. Further, as FatPipe points out, there are some embodiments of the [‘506 Patent](#) where “the controller merely receives . . . the data as packets, *without regard to the possible relation of a given packet to other packets* in the context of a file, database, etc.”²⁹¹ Therefore, even though “efficient compensation” is required in Claims 10-25, “efficient compensation” is not present in Claims 1-9—and its absence does not render those claims invalid.

Moreover, Claims 1-9 relate a different concept than “efficient compensation.” They claim a method of preparing data for transmission over at least two networks that are at least partially in parallel and which differ in their respective security characteristics. These are the “method” claims, while Claims 10 and 22 are the “controller” claims. XRoads has not shown the

²⁸⁹ 444 Memorandum at 38; French Decl. at 39.

²⁹⁰ 444 Memorandum at 38.

²⁹¹ Opposition Memo at 64 (quoting [‘506 Patent](#), col. 5 l. 67 to col. 6 l. 3) (emphasis added).

method claims are invalid. Thus, summary judgment as to the invalidity of the [‘506 Patent](#) is DENIED.

C. Conclusion: Summary Judgment As To The Invalidity of the [‘143 Patent](#) and the [‘506 Patent](#) Is Not Warranted

It is true that the claims of the [‘143 Patent](#) and the [‘506 Patent](#) were initially rejected by the PTO, but the claims were ultimately amended and approved.²⁹² Thus, XRoads’ attempt to base invalidity on rejection of previous claims is unpersuasive.

Further, XRoads has failed to establish invalidity of either the [‘143 Patent](#) or the [‘506 Patent](#). XRoads does not convince the Court that the patents at issue cannot be enabled or that they lack utility. Additionally, FatPipe is correct that “XRoads’ effort to invalidate claims *en masse* fails as a matter of law because each patent claim must be addressed on its own merits. . . . [I]nvalidity must be shown for each *particular* claim, not for the claims as a group.”²⁹³ Therefore, FatPipe’s patents, which are entitled to a presumption of validity, stand.

Finally, to the extent XRoads argues that summary judgment should be entered because the [‘143](#) and [‘506 Patents](#) are “invalid and unenforceable based on prior art and/or other bases,”²⁹⁴ this argument is rejected. Not only is the argument lacking in specificity, XRoads has failed to establish a prima facie case showing invalidity of either patent based on prior art. Although XRoads points to several RFCs and papers from the industry describing routing and NAT,²⁹⁵ XRoads does not explain how FatPipe’s patents fail to teach anything new or novel. A patent is not invalid simply because it incorporates prior technology. While XRoads is correct that the patents at issue include concepts from prior art, each patent sufficiently teaches away

²⁹² French Decl. at 41.

²⁹³ Opposition Memo at 53.

²⁹⁴ 444 Memorandum at 1.

²⁹⁵ [Id.](#) at 24.

from prior art. This was the conclusion of the PTO, and that conclusion is entitled to a presumption of validity as discussed above.²⁹⁶ XRoads has not shown clear and convincing evidence that the [‘143](#) or [‘506 Patent](#) are not enabled or lack novelty. Therefore, summary judgment as to invalidity of is DENIED.

MOTIONS RELATED TO THE 444 MOTION

As noted above, several filings have been made by FatPipe in response to the 444 Motion. FatPipe filed a motion to strike the French Declaration (the “479 Motion to Strike”); a motion to deny the 444 Motion based on [Fed. R. Civ. P. 56\(d\)](#) (the “481 Motion Under [Rule 56\(d\)](#)”); and its own cross-motion for summary judgment (the “483 Cross-Motion”). Each of those motions were filed on the same day. About a year and a half after the close of briefing on the 444 Motion, FatPipe also filed a motion to reopen the briefing (the “583 Motion to Reopen”). Each of these filings will be addressed below.

FatPipe’s 479 Motion to Strike French Declaration

FatPipe argues that the Declaration of Daren French, which was filed in support of XRoads’ 444 Motion, should be stricken.²⁹⁷ FatPipe believes the Declaration “is permeated by improper subject matter;”²⁹⁸ “lacks foundation;”²⁹⁹ “contradicts the Court’s claim construction;”³⁰⁰ and “pleads ‘redundant, immaterial, impertinent, or scandalous matter’ contrary

²⁹⁶ Opposition Memo at 15 (“The [‘143 patent](#)’s novelty is not ‘alleged’ but is instead a strong legal presumption that XRoads can overcome only with clear and convincing evidence.”).

²⁹⁷ 479 Motion to Strike at 1.

²⁹⁸ Plaintiff FatPipe Networks’ Memorandum Supporting Its Motion to Strike and/or Exclude Declaration [444-6] of Daren French in Support of XRoads Motion [444] for Summary Judgment (“479 Memo in Support”) at 1, [docket no. 480](#), filed April 19, 2012.

²⁹⁹ 479 Memo in Support at 2.

³⁰⁰ [Id.](#)

to Rule 12(f).”³⁰¹ FatPipe complains that Mr. French has opined on patent validity when he is not licensed to practice law and not licensed to practice before the PTO.³⁰²

While FatPipe is correct in that the French Declaration is redundant in some places, includes some items that are not essential to the outcome of the motion it supports, and carries a tone that is very opinionated and highly confrontational (placing quotation marks around the word “expert” when referring to FatPipe’s expert, placing quotation marks around the word “patent” when referring to the FatPipe’s patent, extensive capitalization, and making characterizations statements such as the opposing expert “has no idea” regarding certain topics), the Declaration has much valuable content and need not be stricken or excluded. FatPipe does not identify *specific* statements that are subject to exclusion and does not convince the court that Mr. French is unqualified as an expert or his testimony is unreliable.

FatPipe incorrectly argues that the Declaration is unsupported by outside data other than the “*ipse dixit*” of the testifying expert. The Declaration contains several pieces of supporting information such as excerpts of XRoads’ source code,³⁰³ and a packet capture.³⁰⁴ Even FatPipe recognizes this.³⁰⁵ The Declaration contains several citations to the textbooks submitted by the parties on the record regarding computer networking.³⁰⁶ Further, it is undisputed that Mr. French has extensive experience in computer networking, and designed and developed the XRoads EdgeXOS devices, among other experience.³⁰⁷

³⁰¹ [*Id.*](#)

³⁰² [*Id.*](#)

³⁰³ French Decl. at 16, 27.

³⁰⁴ French Decl. at 32.

³⁰⁵ 479 Memo in Support at 16.

³⁰⁶ *See, e.g.*, French Decl. at 13, 14 ns. 21, 23.

³⁰⁷ *See* [Fed. R. Evid. 702](#) (allowing expert to be qualified by “knowledge, skill, experience, training, or education”).

An expert in a patent case can and should refer to the claim construction order and apply the definitions from the order in making conclusions. In addition, experts are allowed to give opinion testimony.³⁰⁸ This content should not be stricken. However, where Mr. French applies the terms of the claim construction order in a manner that is incorrect or inconsistent with the court's interpretation, his testimony has been disregarded. Accordingly, FatPipe's 479 Motion to Strike³⁰⁹ is DENIED.

FatPipe's 481 Motion Under [Rule 56\(d\)](#)

Next, FatPipe argues that the 444 Motion should be "denied, because facts essential to FatPipe's response are unavailable."³¹⁰ Specifically, FatPipe points to discovery requests that allegedly were not fully responded to by XRoads, such as "a native format copy of the XRoads omnistar customer ticket database"³¹¹ and "screen shots and network diagrams in XRoads' omnistar customer support database."³¹² FatPipe argues that XRoads withheld information during discovery and then brought the 444 Motion, thereby prematurely seeking summary judgment. FatPipe contends that XRoads should not be allowed to "benefit from its wrongdoing."³¹³

In the [Tenth Circuit, Rule 56\(d\)](#) "does not operate automatically"; rather, "its protections . . . can be applied only if a party satisfies certain requirements."³¹⁴ Specifically, the party must

³⁰⁸ [Id.](#); [Fed. R. Evid. 703](#).

³⁰⁹ Plaintiff FatPipe Networks' Motion to Strike and/or Exclude Declaration [444-6] of Daren French in Support of XRoads Motion [444] for Summary Judgment ("479 Motion to Strike"), [docket no. 479](#), filed April 19, 2012.

³¹⁰ 481 Motion under [Rule 56\(d\)](#) at 1.

³¹¹ Plaintiff FatPipe Networks' Memorandum in Support of [Rule 56\(d\)](#) Motion in Response to Defendant's Motion [444] for Summary Judgment ("481 Memo in Support") at 10, [docket no. 482](#), filed April 19, 2012.

³¹² [Id.](#)

³¹³ [Id.](#) at 11.

³¹⁴ [Valley Forge Ins. Co. v. Health Care Mgmt. Ptnrs., LTD](#), 616 F.3d 1086, 1096 (10th Cir.2010) (alteration in original) (quoting [Price ex rel. Price v. W. Res., Inc.](#), 232 F.3d 779, 783 (10th Cir.2000)).

provide an affidavit or declaration that identifies the following information: (1) “the probable facts not available,” (2) why those facts cannot be presented currently, (3) “what steps have been taken to obtain these facts,” and (4) “how additional time will enable [the party] to” obtain those facts and rebut the motion for summary judgment.³¹⁵ “Unless dilatory or lacking in merit, the motion should be liberally treated.”³¹⁶

Here, FatPipe provides an affidavit from its counsel, John W. Ogilvie,³¹⁷ but the affidavit does not clearly address each of the four required topics listed in the preceding paragraph. While Mr. Ogilvie concludes that “FatPipe at this time cannot present facts essential to justify its opposition,” there is no discussion about *why* the facts cannot currently be presented (factor #2)—other than XRoads’ failure to provide the information. FatPipe, in its motion and the affidavit, makes a *list* of things that allegedly have not been provided to it,³¹⁸ but fails to tie that list to a *specific* set of reasons that prevent it from adequately opposing summary judgment. Significantly, FatPipe omits any discussion of the voluminous amounts of information that have already been provided to it, and fails to explain how testing of the XRoads device which FatPipe had in its possession was inhibited. Making conclusory statements such as “we cannot present facts essential to justify our opposition” is not sufficient to grant a 56(d) motion.

While FatPipe may be dissatisfied with the information contained in the disclosures and would like to see more information supporting its position, FatPipe has not provided *specific*

³¹⁵ [Valley Forge](#), 616 F.3d at 1096 (quoting [Comm. for the First Amendment v. Campbell](#), 962 F.2d 1517, 1522 (10th Cir.1992)).

³¹⁶ [Comm. for the First Amendment](#), 962 F.2d at 1522 (upholding district court’s denial of [Rule 56\(d\)](#) (56(f)) motion).

³¹⁷ Declaration of John W. Ogilvie in Support of Plaintiff’s [Rule 56\(d\)](#) Motion in Response to Defendant’s Motion [444] for Summary Judgment, [docket no. 482-1](#), filed April 19, 2012.

³¹⁸ 481 Memo in Support at 13 (listing “functionality of the Site-2-Site client,” “its code,” “functionality of XRoads device encryption,” “screen shots and network diagrams,” “relationship between XRoads devices and transparent proxy functionality,” “a usable native format copy of the XRoads omnistar customer ticket database,” and “version of firmware that existed as of the date of the filing of the Complaint”).

reasons, as required by [Rule 56\(d\)](#),³²⁰ why it cannot present facts essential to justify its opposition to the 444 Motion. Part of FatPipe’s argument focuses on the alleged inadequacy of the French Declaration, which has little to do with whether XRoads supplied enough information to FatPipe during discovery—but is a roundabout way to attack the merits of the 444 Motion.

Indeed, as of the time the motion was filed, FatPipe “had roughly three years to discover evidence to establish infringement of its patents by XRoads,” yet it “has failed to develop any material supporting evidence.”³²¹ It is important to note that XRoads’ motion came after the conclusion of a *Markman* hearing and the court’s claim construction order—clearly well into the litigation. Accordingly, because the 444 Motion is not premature, and FatPipe has had plenty of opportunity to gather facts and present an opposition to the motion, FatPipe’s 56(d) Motion³²² is DENIED.

FatPipe’s 483 Cross-Motion for Summary Judgment

After XRoads filed its 444 Motion, FatPipe filed a cross-motion for summary judgment. The cross-motion was filed concurrently with FatPipe’s Opposition to the 444 Motion. FatPipe argues that its “concurrently filed opposition memorandum and the present cross-motion memorandum should be considered together, with each memorandum viewed as incorporated in and providing support for the other memorandum.”³²³ FatPipe argues it “should be granted summary judgment that the presumption of patent validity and enforceability remains in force; that XRoads’ affirmative defenses of laches and equitable estoppel are unsupported; and that the

³²⁰ [Fed. R. Civ. P. 56\(d\)](#).

³²¹ Defendant’s Opposition to Plaintiff FatPipe Networks’ [Rule 56\(d\)](#) Motion (“481 Opposition Memo”) at 1, [docket no. 497](#), filed May 7, 2012.

³²² Plaintiff FatPipe Networks’ [Rule 56\(d\)](#) Motion in Response to Defendant’s Motion [444] for Summary Judgment (“481 Motion under [Rule 56\(d\)](#)”), [docket no. 481](#), filed April 19, 2012.

³²³ Plaintiff FatPipe Networks’ Memorandum Supporting Its Summary Judgment Cross-Motion to XRoads’ Motion [444] for Summary Judgment (“483 Memorandum”) at 4, [docket no. 484](#), filed April 19, 2012.

Court has no jurisdiction over non-asserted claims”³²⁴ In its cross-motion, FatPipe provides a “statement of facts”—which includes a list of things FatPipe believes XRoads has failed to plead or provide, such as “XRoads did not plead inequitable conduct” and “XRoads has provided no evidence of any patent misuse by FatPipe”³²⁵—and argues the [‘143](#) and [‘506 Patents](#) are valid and enforceable. Specifically, FatPipe believes summary judgment should be granted in its favor on unenforceability; specific intent to deceive the USPTO; inventorship; invalidity; prosecution history estoppel; equitable estoppel; laches; noninfringement; and non-asserted claims.³²⁶

FatPipe asks for only three categories of relief in its conclusion—“summary judgment recognizing that the presumptions of validity and enforceability remain in force for all asserted claims and for both FatPipe patents; to grant summary judgment that the defenses of laches and equitable estoppel have failed; and to acknowledge that the Court’s jurisdiction is limited to the claims actually being asserted by FatPipe,”³²⁷ whereas earlier in the cross-motion, FatPipe identified nine separate categories. In spite of these failings, FatPipe’s arguments will be addressed.

Unenforceability

FatPipe argues that patents “are presumed valid and enforceable,” and that the “statutory presumption of validity and enforceability can be overcome only by clear and convincing evidence.”³²⁸ FatPipe is correct. Accordingly, as discussed previously in this memorandum decision and order, the [‘143 Patent](#) and the [‘506 Patent](#) are entitled to a presumption of validity and enforceability that may only be overcome by clear and convincing evidence. FatPipe is also

³²⁴ [Id.](#) at 1.

³²⁵ [Id.](#) at 2-3.

³²⁶ [Id.](#) at 5.

³²⁷ [Id.](#) at 11.

³²⁸ [Id.](#) at 6.

correct that XRoads has *not* sufficiently shown “patent misuse,” “inequitable conduct,” or “specific intent to deceive the USPTO” with clear and convincing evidence.³²⁹ XRoads simply lists a number of allegations of inequitable conduct without citation to supporting evidence.³³⁰ This does not suffice. Additionally, FatPipe is correct that XRoads does not appear to have “actively pursued” the defense of unenforceability.³³¹ Rather, XRoads has chosen to focus on *invalidity* throughout its 444 Motion. Thus, the cross-motion is GRANTED as to enforceability.

Inventorship

FatPipe also argues that it should be granted summary judgment “recognizing that the presumption of validity remains in force” because “XRoads failed to plead any factual allegations to show a violation of Section 116[.]”³³² Section 116 deals with naming the correct inventors of a patent.³³³ Additionally, FatPipe argues, “XRoads appears to have dropped” the defenses of “invalidity under Section 116” by not “actively pursu[ing]” it.³³⁴ XRoads did not raise inventorship in its 444 Motion and does not seriously challenge inventorship in its opposition to the 483 Cross-Motion.³³⁵ FatPipe is correct that there is no clear and convincing evidence to show that the correct inventors were not named on the patent. Accordingly, the cross-motion is GRANTED as to inventorship.

³²⁹ *Id.* at 6-7.

³³⁰ Opposition of Defendant and Counter-Claimant XRoads Networks to Plaintiff FatPipe Networks’ Cross-Motion for Summary Judgment (“483 Opposition”) at 25, [docket no. 505](#), filed May 21, 2012.

³³¹ 483 Memorandum at 9.

³³² *Id.* at 7.

³³³ [35 U.S.C. § 116](#).

³³⁴ 483 Memorandum at 9.

³³⁵ *See generally* 483 Opposition.

Invalidity

Invalidity is addressed in the briefing on the 444 Motion and is discussed in detail previously in this memorandum decision and order. FatPipe’s patents are entitled to a presumption of validity and are not shown to be invalid. Therefore, the cross-motion is GRANTED in favor of FatPipe because clear and convincing evidence has not been presented to show invalidity of the [‘143 Patent](#) and the [‘506 Patent](#).

Prosecution History Estoppel and Noninfringement

FatPipe provides no argument in its 484 Supporting Memo to support its assertion that summary judgment should be granted in its favor as to prosecution history estoppel. Instead, FatPipe ties prosecution history estoppel to noninfringement,³³⁶ and argues that XRoads 444 Motion should *not* be granted as to noninfringement. Noninfringement has already been found previously in this memorandum decision and order. Furthermore, FatPipe does not present a convincing argument that its statements during prosecution history should be ignored. Thus, FatPipe’s cross-motion as to prosecution history estoppel and noninfringement is DENIED.

Laches and Estoppel

FatPipe argues that XRoads’ arguments for equitable estoppel and laches fail. FatPipe argues that equitable estoppel “fails as a matter of law, because XRoads provided no evidence of its elements: (a) conduct by FatPipe which misled XRoads into believing FatPipe did not intend to enforce its patents, (b) XRoads’ reliance on that conduct, and (c) prejudice to XRoads arising from the reliance.”³³⁷ FatPipe also argues that laches “fails as a matter of law, because XRoads provided no evidence of its elements: (a) unreasonable and inexcusable delay by FatPipe in

³³⁶ See 483 Memorandum at 5.

³³⁷ [Id.](#) at 9.

bringing suit, and (b) material prejudice to XRoads attributable to such delay.”³³⁸ FatPipe argues it “brought suit in 2009, well within six years of the earliest date infringement was possible, namely, the issue dates of the patents.”³³⁹ Additionally, FatPipe argues, “XRoads appears to have dropped” equitable estoppel and laches by not “actively pursu[ing]” them.³⁴⁰

In opposition, XRoads argues that “[l]aches operates as a complete defense” because “FatPipe delayed and made false assertions of patent infringement starting in 2004, and continuing to 2006 without taking action. Then there was a multi-year hi[a]tus which led XRoads to determine that FatPipe was not serious in its allegations and would not take action. In the interim, XRoads invested substantially in its business, expanded its product lines, and otherwise acted such that FatPipe’s 2009 lawsuit (five years after original notice and three years after FatPipe has admitted its [sic] was aware of XRoads’ Edge devices) would be extremely prejudicial and potentially annihilating for XRoads.”³⁴¹ XRoads further argues that it is not limited to “equitable” estoppel, but should be allowed to raise any form of estoppel because it raised “estoppel,” not just “equitable estoppel.”³⁴² XRoads cites to several cases in support of its argument. The cases show that summary judgment based on laches or estoppel has been awarded where a party has waited as little as three years³⁴³ before bringing a patent infringement action.³⁴⁴

³³⁸ *Id.* at 8.

³³⁹ *Id.* at 9.

³⁴⁰ *Id.*

³⁴¹ 483 Opposition at 22.

³⁴² *Id.* at 22-23.

³⁴³ *Aspex Eyewear Inc. v. Clariti Eyewear, Inc.*, 605 F.3d 1305 (Fed. Cir. 2010); *Wafer Shave v. Gillette Co.*, 857 F. Supp. 112 (D. Mass. 1993).

³⁴⁴ *Lemelson v. Carolina Enterprises, Inc.*, 541 F. Supp. 645 (S.D.N.Y. 1982); *Troxler Electronic Laboratories, Inc. v. Pine Instrument Co.*, 597 F. Supp. 2d 574 (E.D.N.C. 2009).

“[I]ntentionally misleading silence arises when a patentee threatened immediate or vigorous enforcement of its patent rights but then did nothing for an unreasonably long time.”³⁴⁵ “[E]quitable relief is not a matter of precise formula,”³⁴⁶ and “the trial court must, even when the three elements of equitable estoppel are established, take into consideration any other evidence and facts respecting the equities of the parties”³⁴⁷ Important equitable factors are the amount of money invested in expanding business on the allegedly infringing product and whether the alleged infringer knew the patentee still wished to commence suit.³⁴⁸ “As equitable defenses, laches and equitable estoppel are matters committed to the sound discretion of the trial judge and the trial judge’s decision is reviewed . . . under the abuse of discretion standard.”³⁴⁹

Here, other than a three year “hiatus,” XRoads has failed to show, for purposes of estoppel, (a) conduct by FatPipe which misled XRoads into believing FatPipe did not intend to enforce its patents, such as being non-responsive to communication initiated by XRoads; (b) XRoads’ reliance on that conduct, such as significant investment in its Edge devices or negotiations with FatPipe to acquire the patents at issue;³⁵⁰ or (c) material prejudice to XRoads arising from reliance on perceived abandonment. XRoads notes only a single instance where FatPipe indicated it was considering abandoning certain parts of the lawsuit, but that was after litigation already began—and Fatpipe informed XRoads shortly thereafter that FatPipe intended to continue the lawsuit. In fact, there is nothing specifically identified in XRoads’ 505 Opposition showing FatPipe communicated to XRoads an intention to “vigorously” defend its

³⁴⁵ [Aspex](#), 605 F.3d at 1310.

³⁴⁶ [Id.](#) at 1311.

³⁴⁷ [Id.](#) at 1313.

³⁴⁸ [Id.](#) at 1310; [Wafer Shave](#), 857 F. Supp. at 118-19.

³⁴⁹ [A.C. Aukerman Co. v. RL Chaides Const. Co.](#), 960 F.2d 1020, 1028 (Fed. Cir. 1992).

³⁵⁰ See [Wafer Shave](#), 857 F.Supp. at 117 (describing offer of sale of patent to alleged infringer during hiatus).

patents through the “immediate” filing of a lawsuit, and a subsequent period of extended silence. Instead, XRoads simply argues there was a “hiatus” and does not describe what happened before or during the hiatus.

Further, for purposes of laches, XRoads has not shown unreasonable and inexcusable delay by FatPipe in bringing suit or material prejudice to XRoads attributable to such delay. Nothing indicates FatPipe “lulled [XRoads] into reasonably believing that [a] threat [if one had been made] had been abandoned.”³⁵¹ XRoads simply provides conclusory remarks that it was prejudiced by FatPipe’s silence without describing specifically how it was prejudiced. Additionally, aside from including these defenses in its initial pleadings, XRoads does not substantially address them elsewhere. And there is no indication that a presumption of laches should apply since not more than six years past between FatPipe’s knowledge of XRoads devices and the filing of the lawsuit.³⁵² Because of XRoads’ lack of specificity with regard to the elements of laches and estoppel, as well as XRoads’ inaction in pursuing these defenses, summary judgment is GRANTED in favor of FatPipe as to laches and estoppel. That is, laches and estoppel do *not* act to bar FatPipe’s claims.

Non-Asserted Claims

Finally, FatPipe argues that because some patent claims are not being asserted by FatPipe,³⁵³ the court lacks jurisdiction over those claims and cannot award summary judgment to XRoads as to those claims “as a matter of jurisdictional law.”³⁵⁴ Even so, FatPipe argues, “this lack of jurisdiction does *not* prevent the Court from granting FatPipe’s cross-motion” because

³⁵¹ [Id. at 128.](#)

³⁵² See [A.C. Aukerman Co., 960 F.2d at 1028](#) (“A presumption of laches arises where a patentee delays bringing suit for more than six years after the date the patentee knew or should have known of the alleged infringer’s activity.”).

³⁵³ 483 Memorandum at 10 (the non-asserted claims are: Claims 4, 8, 9, and 10 of the [‘143 Patent](#); and Claims 8, 9, 14, 15, 19, 21, and 24 of the [‘506 Patent](#)).

³⁵⁴ 483 Memorandum at 10.

“FatPipe simply asks the Court to hold that XRoads has not shown the clear and convincing proof necessary to overcome the presumption of validity and enforceability. Lack of jurisdiction over the non-asserted claims has no effect on their validity or enforceability.”³⁵⁵ This inconsistent and confusing argument is rejected. No finding or ruling can be made as to non-asserted claims. To the extent FatPipe seeks a ruling that the *non-asserted claims* are valid or enforceable, the cross-motion is DENIED. Summary judgment cannot be granted as to claims that are not part of the case. Any statements or conclusions made in this memorandum decision and order do not apply to non-asserted claims, which are: claims 4, 8, 9, and 10 of the [‘143 Patent](#); and claims 8, 9, 14, 15, 19, 21, and 24 of the [‘506 Patent](#).

FatPipe’s 583 Motion to Reopen the 444 Motion

Approximately a year and a half after briefing was completed on the 444 Motion,³⁵⁶ and after the court indicated it was “very inclined on the state of the record to grant in XRoads’ favor a motion for summary judgment,”³⁵⁷ FatPipe filed a motion to reopen the briefing (the “‘583 Motion to Reopen”).³⁵⁸ That motion was accompanied by the Declaration of Joel Williams, a new expert retained by FatPipe, who concluded the XRoads devices he had tested “infringe the [‘506 patent](#).”³⁵⁹ Nothing in the declaration or the ‘583 Motion addresses the [‘143 Patent](#). The court allowed each party to file a supplemental memorandum “arguing the significance of the [583-1] Williams Declaration as to the 444 Motion for Summary Judgment.”³⁶⁰ FatPipe filed its

³⁵⁵ [Id.](#)

³⁵⁶ Briefing on the 444 Motion was completed May 7, 2012.

³⁵⁷ Transcript of August 1, 2013 Telephone Hearing at 138:13-15, [docket no. 552](#), filed August 9, 2013.

³⁵⁸ Plaintiff’s Motion to Re-Open and Supplement the Record on Defendant’s Motion for Summary Judgment [Dkt. No. 444] (“583 Motion to Reopen”), [docket no. 583](#), filed November 29, 2013.

³⁵⁹ Declaration of Joel Williams (“Williams Decl.”) at 13, ¶ 35, [docket no. 583-1](#), filed November 29, 2013.

³⁶⁰ Docket Text Order, docket no. 610, entered August 14, 2014.

supplemental memorandum on August 29, 2014³⁶¹ and XRoads filed its response to the supplemental memorandum on September 12, 2014.³⁶² Consistent with the confrontational tenor of this litigation, FatPipe then filed objections to XRoads' response on September 19, 2014,³⁶³ and XRoads responded to FatPipe's objections on September 22, 2014.³⁶⁴ The '583 Motion to Reopen is DENIED for the reasons stated below.

"A district court has broad discretion to reopen a case to accept additional evidence and that decision will not be overturned on appeal absent an abuse of that discretion."³⁶⁵ "In deciding whether to reopen, the court should consider the time the motion is made, the character of additional testimony and the potential prejudicial effect in granting or denying the motion."³⁶⁶ "Ultimately, fairness is the key criterion in determining whether to reopen."³⁶⁷ Here, although this is not a motion to reopen the case, but rather a motion to reopen just the briefing on the 444 Motion, the analysis is the same because new evidence is sought to be admitted past the established time for doing so.

First, with regard to the time the motion has been made, FatPipe had ample opportunity to have an expert conduct the testing that Williams conducted. However, instead of conducting such testing, FatPipe filed motions for sanctions against XRoads claiming XRoads had not produced enough information. FatPipe does not contradict XRoads' assertion that when the

³⁶¹ Plaintiff's Supplemental Memorandum in Opposition to Defendant's Motion for Summary Judgment [Dkt. No. 444], [docket no. 612](#), filed under seal August 29, 2014.

³⁶² Response of Defendant XRoads Networks as to Williams Declaration, [docket no. 614](#), filed September 12, 2014.

³⁶³ DUCivR7-1(b)(1)(B) Objections of FatPipe to the Purported Evidence and Response of Defendant XRoads Networks [Dkt. No. 614], [docket no. 615](#), filed September 19, 2014.

³⁶⁴ Response of Defendant XRoads Networks to Plaintiff's Evidentiary Objections, [docket no. 617](#), filed September 22, 2014.

³⁶⁵ [Smith v. Rogers Galvanizing Co.](#), 148 F.3d 1196, 1197-98 (10th Cir. 1998).

³⁶⁶ *Id.* at 1198 (internal quotation marks omitted) (alteration in original) (quoting [Joseph v. Terminix Int'l Co.](#), 17 F.3d 1282, 1285 (10th Cir. 1994)).

³⁶⁷ [Smith](#), 148 F.3d at 1198 (internal quotation marks omitted).

lawsuit was initiated, FatPipe had in its possession at least one XRoads Edge device and later acquired a second device to conduct whatever testing was necessary to establish infringement.³⁶⁸ FatPipe has had at least two different experts (not including Williams), plus FatPipe's own internal personnel, to determine whether XRoads' devices infringe the patents at issue. Asking to reopen the briefing until a year and half after the briefing on the 444 Motion was completed is not based on any lack of prior ability to conduct the needed testing.

Second, the additional proposed evidence is not narrowly confined or uncontroverted.³⁶⁹ Williams conclusions are sweeping. He asserts that the XRoads devices "infringe the ['506 patent'](#)" and that Mr. French's conclusions are incorrect.³⁷⁰ These statements from Mr. Williams are broad and cover every claim of the ['506 Patent](#). Allowing the record to be reopened would essentially restart the Motion, and in many respects restart the litigation since Williams' has not been deposed and XRoads has not had an opportunity to investigate his conclusions or the devices he tested. Furthermore, Williams's conclusions are not uncontroverted. There are *significant questions* about whether Williams's testing was performed correctly and whether the devices he tested had been altered in any way.³⁷¹ For example, XRoads argues that Williams's report shows "only that both tunnels allegedly could be used for different sessions/messages, not the same session/message and thus not with interleaved packets"³⁷² In other words, Williams' testing may have shown different data transmissions traversing two networks, not the same data transmission as is required by FatPipe's patents. Because of the disputed nature of the

³⁶⁸ Opposition of Defendant XRoads Networks to Motion to Augment Summary Judgment Record at 1, [docket no. 594](#), filed December 17, 2013 (citing docket nos. 301-304, 314-315, 321-322, 329-330, and 415-416).

³⁶⁹ See [Smith, 148 F.3d at 1198](#) (allowing case to be reopened because the evidence was "narrowly confined and largely uncontroverted").

³⁷⁰ Williams Decl. at 13.

³⁷¹ Opposition of Defendant XRoads Networks to Motion to Augment Summary Judgment Record at 8, [docket no. 594](#), filed December 17, 2013.

³⁷² [Id.](#)

Williams declaration, as well as the breadth of his testimony, this factor does not support reopening the briefing.

Finally, reopening the 444 Motion would extend this case significantly more than it has already been extended. Allowing additional time to resolve the questions raised by Williams does harm to the administration of justice, and would greatly expand costs for each of the parties. There is no need to continue to delay resolution of this aging case. Had the Williams evidence been raised earlier in the case, there would have been a greater likelihood that it would be admitted. But at this stage, the prejudicial effect of reopening the 444 Motion is too high.

Because none of these factors weigh in favor of reopening the 444 Motion, FatPipe's Motion to Reopen is DENIED.

CONCLUSION AND ORDER

Because FatPipe has failed to raise a genuine issue of material fact with regard to infringement, XRoads is entitled to summary judgment as to noninfringement of the [‘143 Patent](#) and the [‘506 Patent](#). However, because XRoads has failed to show by clear and convincing evidence that either the [‘143 Patent](#) or the [‘506 Patent](#) is invalid, XRoads is not entitled to summary judgment regarding invalidity. Therefore, the 444 Motion³⁷³ is GRANTED IN PART as to non-infringement of the [‘143 Patent](#) and the [‘506 Patent](#), and DENIED IN PART as to invalidity of those patents. These conclusions resolve the four causes of action brought by FatPipe³⁷⁴ and the four counterclaims brought by XRoads.³⁷⁵

FatPipe’s 479 Motion to Strike,³⁷⁶ 481 Motion Under [Rule 56\(d\)](#),³⁷⁷ and 583 Motion to Reopen³⁷⁸ are DENIED for the reasons stated above.

FatPipe’s 483 Cross-Motion³⁷⁹ is GRANTED IN PART AND DENIED IN PART. The 483 Cross-Motion is GRANTED as to unenforceability, improper attribution of inventorship, invalidity, laches, and estoppel. It is DENIED as to prosecution history estoppel and

³⁷³ Defendant’s Notice of Cross-Motion and Cross-Motion for Summary Judgment and/or Partial Summary Judgment on All Claims for Relief and/or All Issues of Liability [sic] Asserted by Plaintiff FatPipe Networks, Ltd. (“444 Motion”), [docket no. 444](#), filed March 6, 2012.

³⁷⁴ Complaint for Patent Infringement, [docket no. 1](#), filed February 27, 2009 (listing the four causes of action as: (1) Patent Infringement of the [‘143 Patent](#); (2) Patent Infringement of the [‘506 Patent](#); (3) Inducement to Infringe the [‘143 Patent](#); and (4) Inducement to Infringe the [‘506 Patent](#)).

³⁷⁵ Defendant/Counterclaim Plaintiff XRoads Networks, Inc.’s Answer, Affirmative Defenses and Counterclaims at 6-8, [docket no. 4](#), filed March 31, 2009 (listing the four counterclaims as: (1) Declaratory Judgment of Non-Infringement of the [‘143 Patent](#); (2) Declaratory Judgment of Invalidity of the [‘143 Patent](#); (3) Declaratory Judgment of Non-Infringement of the [‘506 Patent](#); and (4) Declaratory Judgment of Invalidity of the [‘506 Patent](#)).

³⁷⁶ Plaintiff FatPipe Networks’ Motion to Strike and/or Exclude Declaration [444-6] of Daren French in Support of XRoads Motion [444] for Summary Judgment (“479 Motion to Strike”), [docket no. 479](#), filed April 19, 2012.

³⁷⁷ Plaintiff FatPipe Networks’ [Rule 56\(d\)](#) Motion in Response to Defendant’s Motion [444] for Summary Judgment (“481 Motion under [Rule 56\(d\)](#)”), [docket no. 481](#), filed April 19, 2012.

³⁷⁸ Plaintiff’s Motion to Re-Open and Supplement the Record on Defendant’s Motion for Summary Judgment [Dkt. No. 444] (“583 Motion to Reopen”), [docket no. 583](#), filed November 29, 2013.

³⁷⁹ Plaintiff FatPipe Networks’ Summary Judgment Cross-Motion to XRoads’ Motion [444] for Summary Judgment (“483 Cross-Motion”), [docket no. 483](#), filed April 19, 2012.

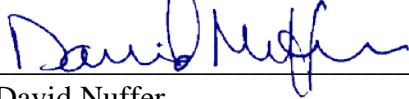
infringement. Also, to the extent the 483 Cross-Motion seeks a declaration that this memorandum decision and order deals only with *asserted claims*, that request is GRANTED. Any statements or conclusions made in this memorandum decision and order do not apply to non-asserted claims.

IT IS FURTHER ORDERED that because this Memorandum Decision and Order refers to material filed under seal, the parties shall meet and confer and FatPipe shall file within fourteen (14) days a redacted version of (a) this Memorandum Decision and Order, and (b) each sealed document cited in this Memorandum Decision and Order, unless excused by court order.

The Clerk is directed to close the case.

Dated September 22, 2015.

BY THE COURT:

A handwritten signature in blue ink, appearing to read "David Nuffer", is written over a horizontal line.

David Nuffer
United States District Judge

United States District Court
for the
District of Utah
September 22, 2015

*****MAILING CERTIFICATE OF THE CLERK*****

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2:09-cv-00186-DN

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